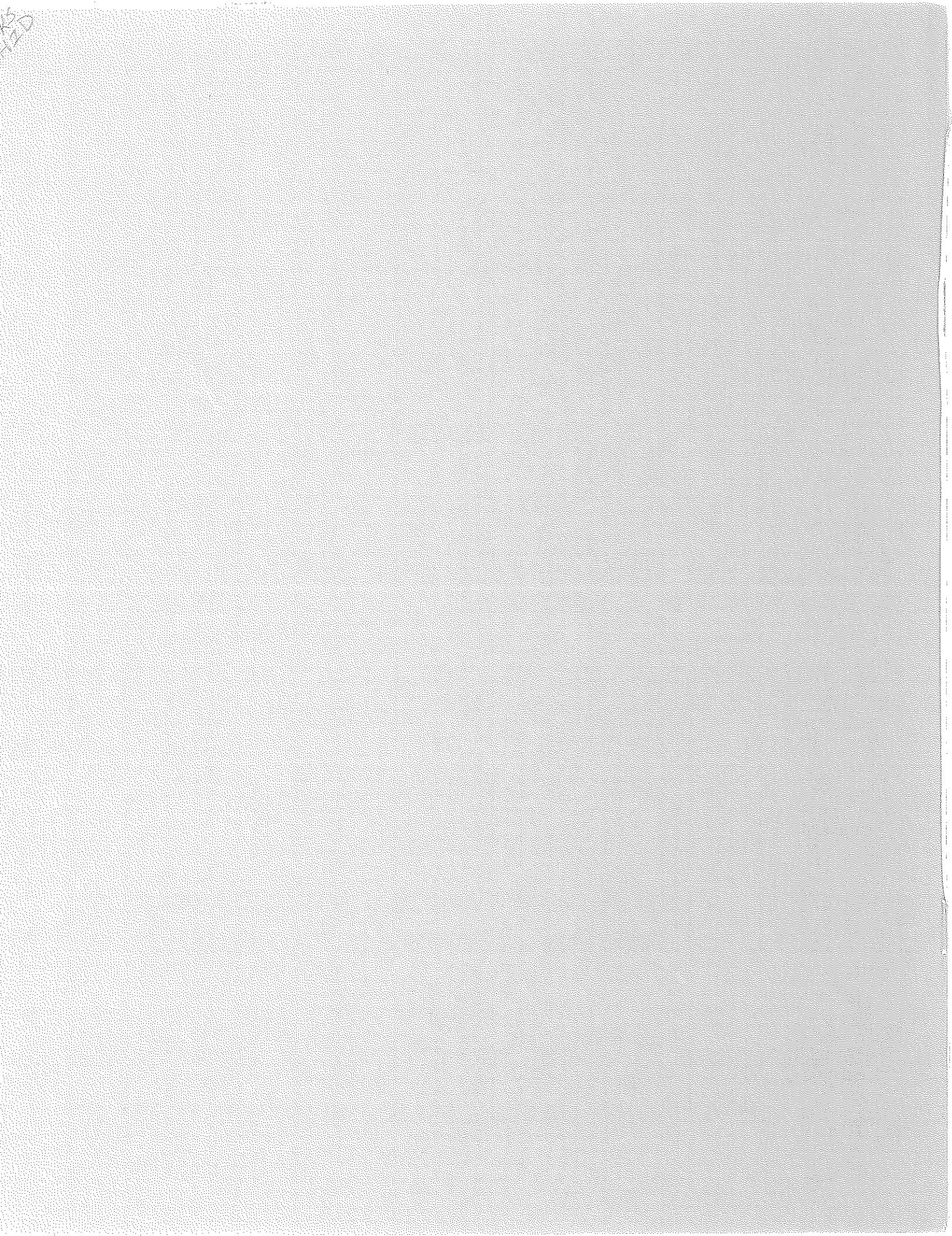


Reportable Diseases in Kansas 1994 Summary



Kansas Department of Health & Environment • Bureau of Disease Control



REPORTABLE DISEASES IN KANSAS, 1994 SUMMARY: ERRATA

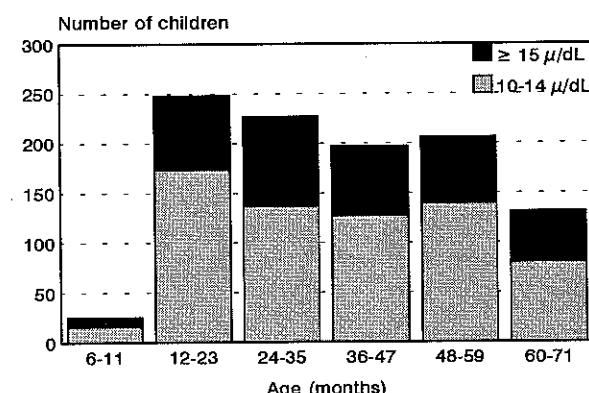
Pgs. 42-48: 1994 Cases of Tuberculosis by County

0	Allen	0	Jackson	2	Saline
0	Anderson	0	Jefferson	0	Scott
0	Atchison	0	Jewell	30	Sedgwick
0	Barber	8	Johnson	1	Seward
1	Barton	0	Kearny	5	Shawnee
1	Bourbon	0	Kingman	0	Sheridan
0	Brown	0	Kiowa	0	Sherman
0	Butler	0	Labette	0	Smith
0	Chase	0	Lane	0	Stafford
0	Chataqua	2	Leavenworth	0	Stanton
1	Cherokee	0	Lincoln	1	Stevens
0	Cheyenne	0	Linn	0	Sumner
0	Clark	0	Logan	0	Thomas
0	Clay	1	Lyon	0	Trego
1	Cloud	0	Marion	0	Wabaunsee
0	Coffey	0	Marshall	0	Wallace
0	Comanche	1	McPherson	0	Washington
2	Cowley	0	Meade	0	Wichita
0	Crawford	0	Miami	0	Wilson
0	Decatur	0	Mitchell	0	Woodson
0	Dickinson	1	Montgomery	6	Wyandotte
0	Doniphan	0	Morris		
1	Douglas	0	Morton	84	TOTAL
1	Edwards	0	Nemaha		
0	Elk	0	Neosho		
0	Ellis	0	Ness		Pg 16: Pediatric Lead Poisoning
0	Ellsworth	0	Norton		
8	Finney	1	Osage		% change from 1993 should read - plus 90%
2	Ford	0	Osborne		
0	Franklin	0	Ottawa		
1	Geary	0	Pawnee		Pediatric lead poisoning by age group
0	Gove	0	Phillips		Kansas, 1994
0	Graham	0	Pottawatomie		
1	Grant	0	Pratt		
1	Gray	0	Rawlins		
2	Greeley	1	Reno		
0	Greenwood	0	Republic		
0	Hamilton	1	Rice		
0	Harper	0	Riley		
0	Harvey	0	Rooks		
0	Haskell	0	Rush		
0	Hodgeman	0	Russell		

Pg 16: Pediatric Lead Poisoning

% change from 1993 should read - plus 90%

Pediatric lead poisoning by age group
Kansas, 1994



REPORTABLE DISEASES

IN

KANSAS

1994 SUMMARY



Larissa Wilberschied, M.S.
March, 1995

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INTRODUCTION

Purpose and format of this report

This is the third annual summary of reportable diseases by the Bureau of Disease Control. The purpose of the report is to provide useful information on notifiable diseases in Kansas to health care providers, public health workers and policy makers.

The report is divided into two sections. Section I presents summaries of 29 diseases or conditions of public health importance. Data are presented mainly by graphs and statistics. Whenever possible, rates have been calculated to adjust for population size allowing for more meaningful interpretation of the data.

There were a few changes made in this year's report. Arboviral encephalitis and the results of the 1993 and 1994 mosquito trappings were added to this year's report. Reports from private laboratories of pediatric lead poisoning have been included with state laboratory results for the first time. Finally, when available, information on disease trends for the United States has been included for comparison with Kansas trends.

Disease incidence for urban and rural areas has also been included for most diseases. Urban areas were defined as counties with populations $\geq 100,000$. Urban areas therefore represent the three largest metropolitan areas in the state [Kansas City (Johnson and Wyandotte Counties), Wichita (Sedgwick County) and Topeka (Shawnee County)], which account for 44% of the population. The remaining 101 counties in the state are classified as

rural areas for the purposes of this report.

Section II provides the list of reportable diseases during 1994, a summary of reportable diseases by year for 1983-1994 and a summary of reportable diseases by county for 1994. Also included are a list of county abbreviations for use with Table 3, a map of Kansas with county names, and a list of publications on disease control from KDHE in 1994.

Disease reporting in Kansas

Selected infectious diseases are reportable by law in Kansas by health care providers, laboratories and hospitals (Section II, Table 1). Reports are usually first sent to the local health department. The local health department is responsible for providing basic public health interventions such as providing immune globulin to a household contact of a person with hepatitis A or treating sexual contacts of a person with gonorrhea.

Reports are then sent to the Bureau of Disease Control in the Kansas Department of Health and Environment for review. After reports have been entered into the National Electronic Telecommunications System for Surveillance (NETSS), weekly summaries are forwarded to the Centers for Disease Control and Prevention (CDC) for inclusion in the Morbidity and Mortality Weekly Report. The final step in the surveillance system occurs when CDC sends selected data to the World Health Organization.

Local, state, national and international health agencies that collect surveillance data are responsible for analyzing and interpreting the data. The information is

used for planning, implementing and evaluating public health programs. Surveillance data can be used to determine the need for public health action and to assess the effectiveness of programs.

Important disease trends in 1994

The number of vaccine preventable diseases remained low with no cases of polio or diphtheria reported. The incidence of *Haemophilus influenzae* meningitis continued to decline. Measles, mumps and rubella remained at low levels. Pertussis and hepatitis B continued to be a problem.

Case counts for two sexually transmitted diseases (gonorrhea and syphilis) declined during 1994. Following the implementation of a more aggressive testing program, case counts for chlamydia increased. AIDS counts decreased in 1994 compared to 1993. However, the overall trend of increasing AIDS rates continued. The large number of cases in 1993 was, in part, due to 1) the introduction of a new case definition and 2) the retroactive application of the new definition in 1993 and an active, but time limited, effort in the Kansas City area to identify unreported AIDS cases in order to secure Ryan White Care funding.

Tuberculosis remained a problem in 1994. While the incidence of TB in Kansas remained well below the national average, health departments often struggled to provide the services required by the increased number of patients.

Four confirmed cases of hantavirus pulmonary syndrome were reported in

Kansas in 1994. Only one of the cases occurred in 1994. The remaining three cases were diagnosed retrospectively as far back as 1983.

Enteric infections including salmonellosis, shigellosis and giardiasis continued to be reported in large numbers. Although not yet reportable by law, reports of *E. coli* O157:H7 continued to increase. Two foodborne outbreaks of salmonella were investigated in addition to one foodborne campylobacter outbreak and a multistate outbreak of cryptosporidium associated with a swimming pool. A viral agent was suspected in some outbreaks. In other outbreaks, no causative agent was identified.

Interpreting the data

When interpreting the data in this report it is important to remember that disease reporting is incomplete and often varies by disease. For example, reporting of AIDS cases is very good whereas the reporting of chickenpox is poor. Absolute numbers are less meaningful than trends when interpreting the data. It is also important to note that since 59% (62/105) of counties in Kansas have populations less than 10,000, it is possible to have high rates of disease in these counties even if only one case is reported.

Acknowledgments

We would like to thank all physicians, nurses, laboratorians and health department staff who participated in reportable disease surveillance during 1994. We would also like to acknowledge Paula Schumacher for the cover design.

SECTION I

DISEASE

SUMMARIES

AIDS

Number of cases - 227

% change from 1993 - minus 37%

Kansas rate - 8.9 per 100,000

U.S. rate (1993) - 40.2 per 100,000

Age of case-patients

Median - 35 years

Range - 1 to 73 years

Rate by sex

Female - 1.5 per 100,000

Male - 16.6 per 100,000

Rate by race

White - 7.9 per 100,000

Black - 27.3 per 100,000

Asian - 0 per 100,000

Am. Indian - 13.7 per 100,000

Rate by ethnicity

Hispanic - 9.6 per 100,000

Non Hispanic - 4.1 per 100,000

Rate by geographic area

Urban - 14.0 per 100,000

Rural - 4.8 per 100,000

Cases by transmission categories

Men who have sex

with men (MSM) 150 (66%)

Injecting drug

use (IDU) 10 (4%)

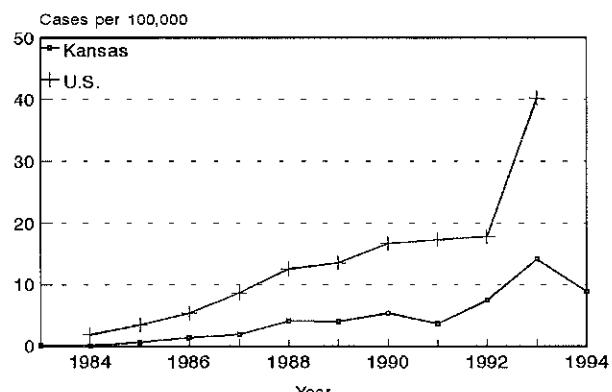
MSM/IDU 9 (4%)

Blood products 11 (5%)

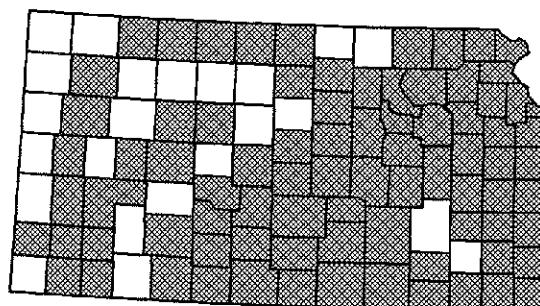
Heterosexual 17 (8%)

Other 30 (13%)

AIDS rate by year
Kansas, 1983-1994

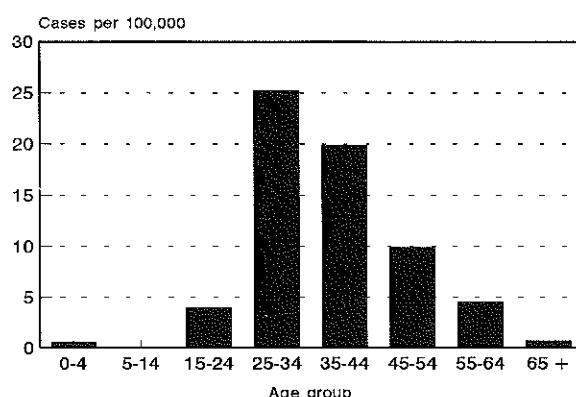


Counties affected by HIV/AIDS
Kansas, 1981-1994



Shaded counties have reported or
treated at least one person with HIV or AIDS

AIDS rate by age group
Kansas, 1994



Campylobacteriosis

Number of cases - 247

% change from 1993 - plus 23%

Kansas rate - 9.7 per 100,000

U.S. rate (1993) - not available

Age of case-patients

Median - 30 years

Range - < 1 to 84 years

Rate by sex

Female - 9.9 per 100,000

Male - 9.6 per 100,000

Rate by race - not available

Rate by geographic area

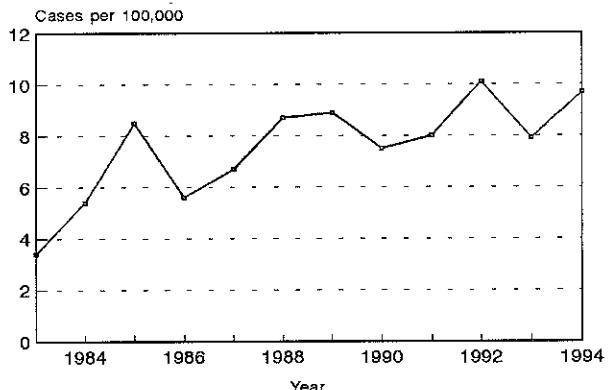
Urban - 14.1 per 100,000

Rural - 6.1 per 100,000

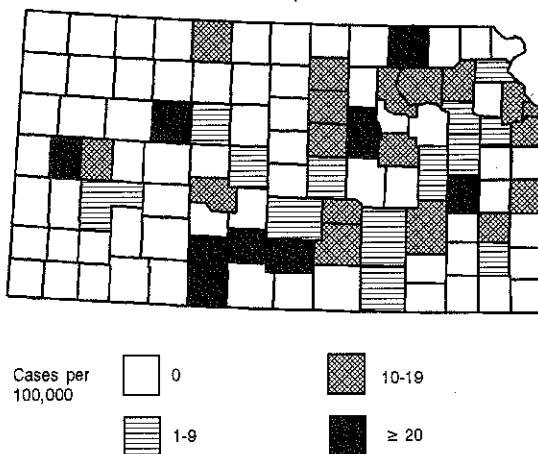
Species identified by state lab

C. jejuni	114 (99%)
C. coli	1 (1%)

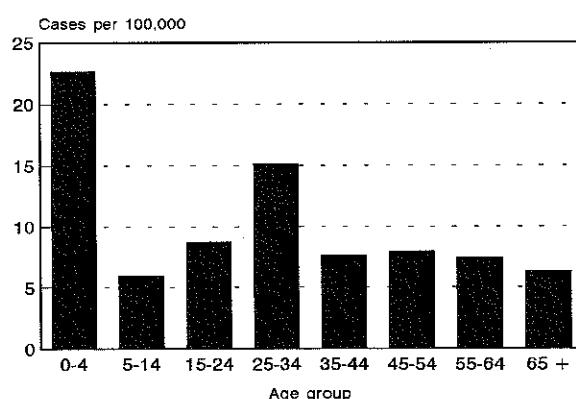
Campylobacteriosis rate by year
Kansas, 1983-1994



Campylobacteriosis rate by county
Kansas, 1994



Campylobacteriosis rate by age group
Kansas, 1994



Chlamydia

Number of cases - 6,393

% change from 1993 - plus 12%

Kansas rate - 250.3 per 100,000

U.S. rate (1993) - 152.5 per 100,000

Age of case-patients

Median - 20 years

Rate by sex

Female - 405.0 per 100,000

Male - 94.6 per 100,000

Rate by race

White - 127.1 per 100,000

Black - 1,393.7 per 100,000

Asian - 189.0 per 100,000

Am. Indian - 286.8 per 100,000

Rate by ethnicity

Hispanic - 482.5 per 100,000

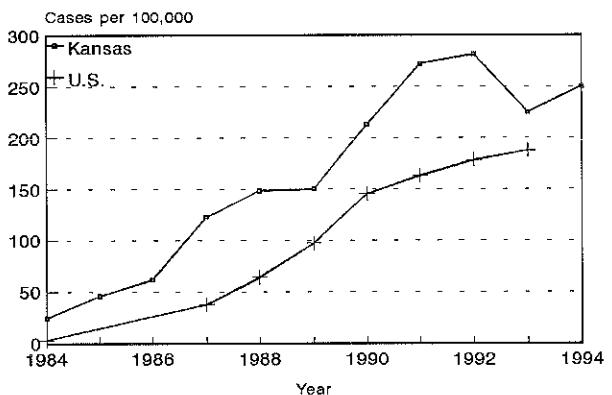
Non Hispanic - 207.8 per 100,000

Rate by geographic area

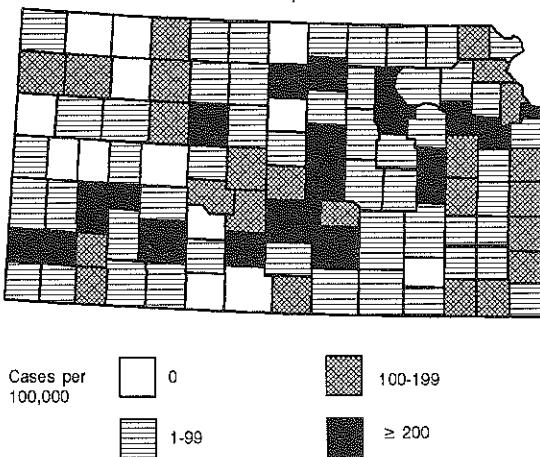
Urban - 331.7 per 100,000

Rural - 192.3 per 100,000

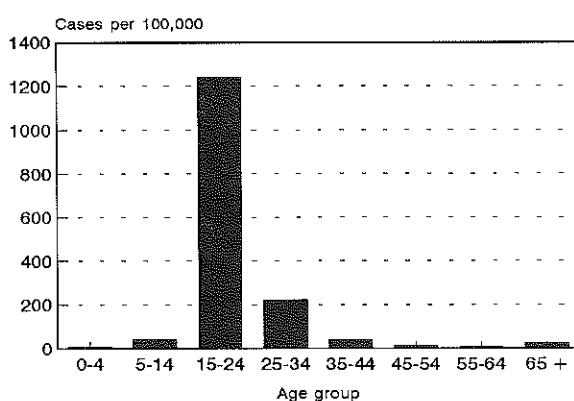
Chlamydia rate by year
Kansas, 1984-1994



Chlamydia rate by county
Kansas, 1994



Chlamydia rate by age group
Kansas, 1994



E. Coli 0157:H7

Number of cases - 25

% change from 1993 - plus 127%

Kansas rate - 1.0 per 100,000

U.S. rate (1993) - not available

Age of case-patients

Median - 13 years

Range - 1 to 57 years

Rate by sex

Female - 0.9 per 100,000

Male - 1.0 per 100,000

Rate by race - not available

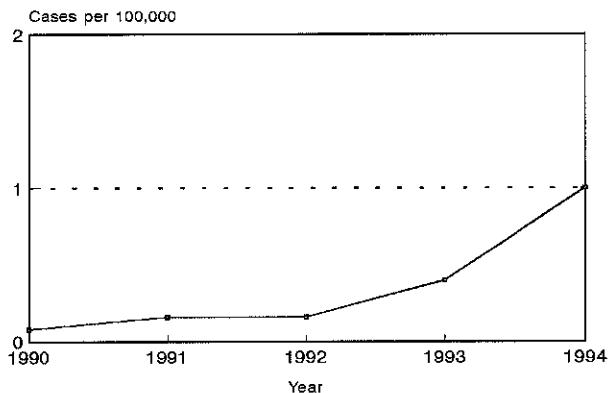
Rate by geographic area

Urban - 0.8 per 100,000

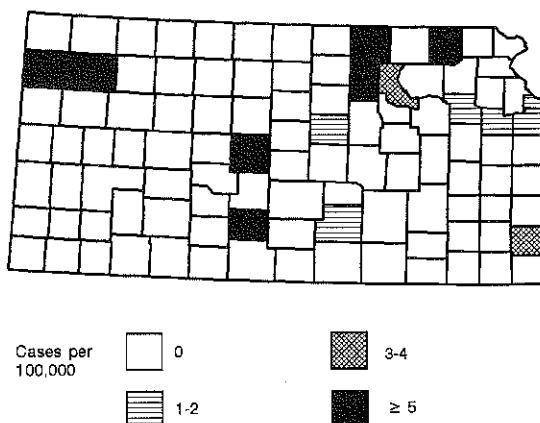
Rural - 1.1 per 100,000

Comment: Two individuals (8%) were reported to have had Hemolytic Uremic Syndrome, a complication of E. coli infections.

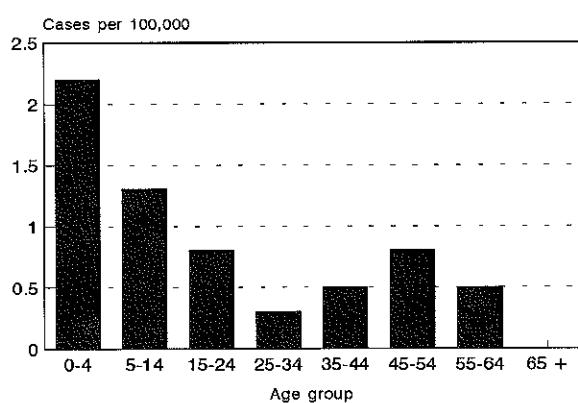
E. Coli O157:H7 rate by year
Kansas, 1983-1994



E. coli O157:H7 rate by county
Kansas, 1994



E. coli O157:H7 rate by age group
Kansas, 1994



Arboviral Encephalitis

Human arbovirus cases, 1964-1994

	Kansas		U.S.	
	SLE	WEE	SLE	WEE
1964	2	2	470	64
1965	1	10	58	172
1966	20	6	325	47
1967	3	4	15	19
1968	3	0	35	17
1969	1	0	16	21
1970	11	1	15	4
1971	28	2	57	11
1972	0	0	13	8
1973	0	0	5	4
1974	2	0	72	2
1975	35	0	1815	132
1976	12	0	379	1
1977	0	1	161	41
1978	0	0	26	3
1979	1	0	32	3
1980	1	0	167	0
1981	3	2	15	19
1982	0	0	34	9
1983	0	0	21	7
1984	0	0	33	2
1985	0	0	21	1
1986	0	0	43	7
1987	2	0	17	41
1988	0	1	4	1
1989	0	0	33	0
1990	0	0	247	0
1991	0	0	78	1
1992	0	0	15	0
1993	0	0	16	0
1994	0	0	19	2
Total	125	36	4257	639

Comment: In 1993, following extensive flooding in the midwest, mosquito trapping was conducted at Fort Riley and Fort Leavenworth, and Doniphan, Douglas, Jefferson, Johnson, Riley, and Shawnee counties. Saint Louis encephalitis (SLE) vector counts were low in Jefferson, Johnson and Riley counties and moderate in Doniphan, Shawnee and Douglas counties. Western equine encephalitis (WEE) vector counts were very low in all except Riley County. None of the 139 pools of *Culex pipiens*, consisting of 6,258 mosquitoes, tested positive for SLE or WEE.

In 1994, mosquito trapping was conducted in Doniphan, Douglas, Jefferson, Johnson, Riley, Shawnee, and Wyandotte counties. None of the 1,359 pools of *Culex pipiens*, consisting of no more than 25 mosquitoes each, tested positive for SLE. Testing for WEE was not done.

Mosquitoes trapped by month
Kansas, 1994

Month	Number of trap days	Number <i>Culex pipiens</i>	Number <i>Culex tarsalis</i>
June	396	2425	6
July	415	5226	49
August	470	6342	340
September	432	7116	36
October	324	2556	8

Giardiasis

Number of cases - 415

% change from 1993 - plus 8%

Kansas rate - 16.3 per 100,000

U.S. rate (1993) - not available

Age of case-patients

Median - 21 years

Range - < 1 to 81 years

Rate by sex

Female - 16.8 per 100,000

Male - 14.9 per 100,000

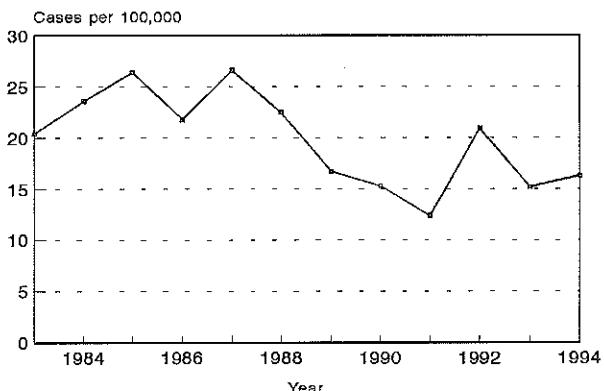
Rate by race - not available

Rate by geographic area

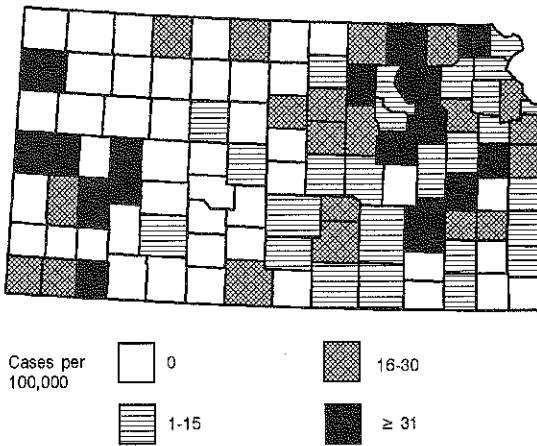
Urban - 18.0 per 100,000

Rural - 14.4 per 100,000

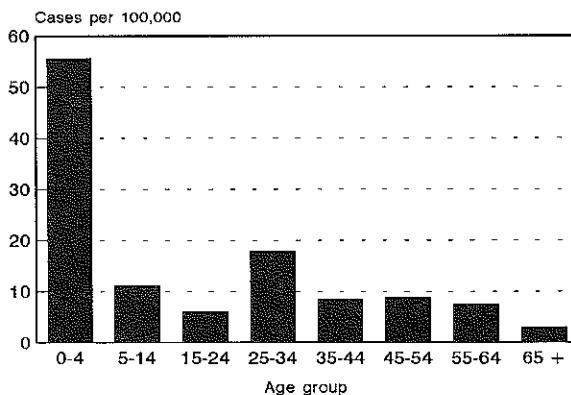
Giardiasis rate by year
Kansas, 1983-1994



Giardiasis rate by county
Kansas, 1994



Giardiasis rate by age group
Kansas, 1994



Gonorrhea

Number of cases - 3,682

% change from 1993 - minus 8%

Kansas rate - 144.2 per 100,000

U.S. rate (1993) - 172.4 per 100,000

Age of case-patients

Median - 21 years

Rate by sex

Female - 137.3 per 100,000

Male - 152.7 per 100,000

Rate by race

White - 36.5 per 100,000

Black - 1,592.9 per 100,000

Asian - 40.9 per 100,000

Am. Indian - 113.8 per 100,000

Rate by ethnicity

Hispanic - 172.9 per 100,000

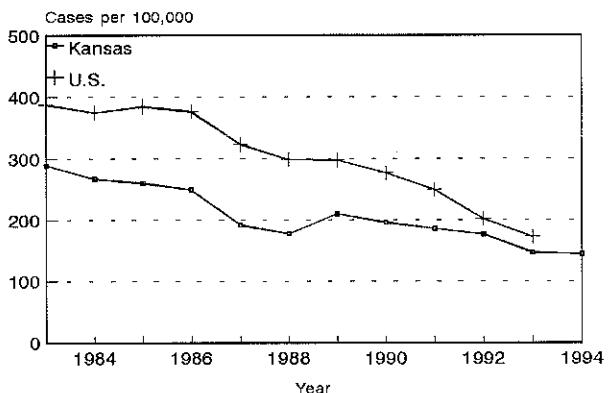
Non Hispanic - 131.3 per 100,000

Rate by geographic area

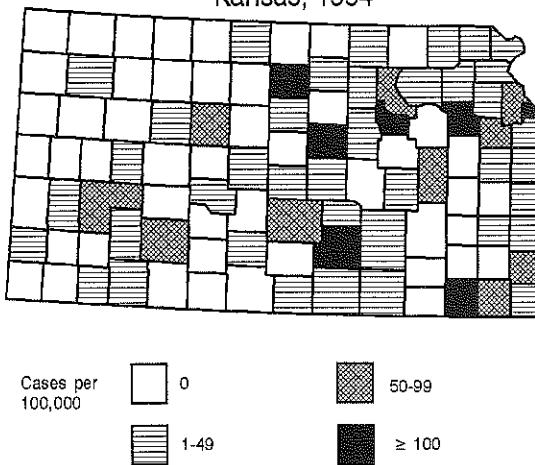
Urban - 248.9 per 100,000

Rural - 60.1 per 100,000

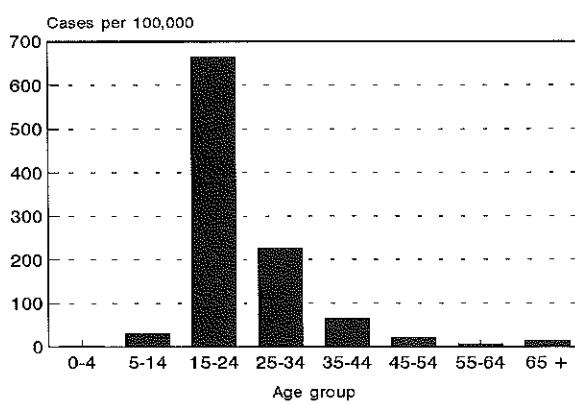
Gonorrhea rate by year
Kansas, 1983-1994



Gonorrhea rate by county
Kansas, 1994



Gonorrhea rate by age group
Kansas, 1994



Haemophilus influenzae Meningitis

Number of cases - 3

% change from 1993 - minus 25%

Kansas rate - 0.1 per 100,000

U.S. rate (1993) - 0.6 per 100,000

Age of case-patients

Median - 28 years

Range - < 1 to 55 years

Rate by sex

Female - 0.1 per 100,000

Male - 0.2 per 100,000

Rate by race

White - 0.1 per 100,000

Black - 0 per 100,000

Asian - 0 per 100,000

Am. Indian - 0 per 100,000

Rate by geographic area

Urban - 0.2 per 100,000

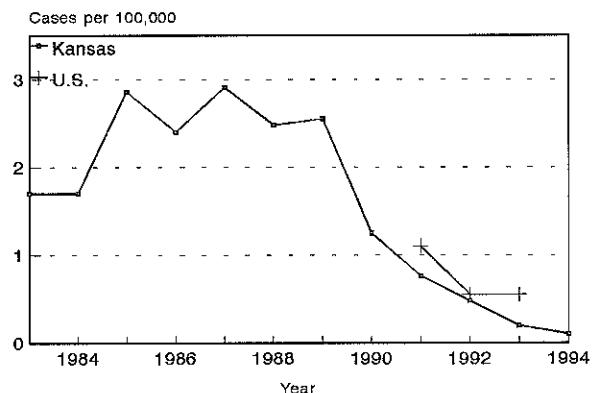
Rural - 0.1 per 100,000

Vaccination status of pediatric cases

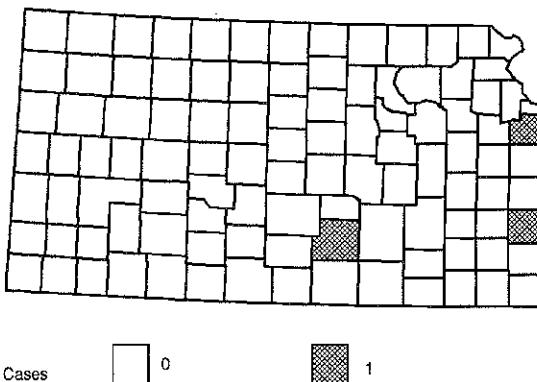
Up-to-date	2 (67%)
------------	---------

Unknown	1 (33%)
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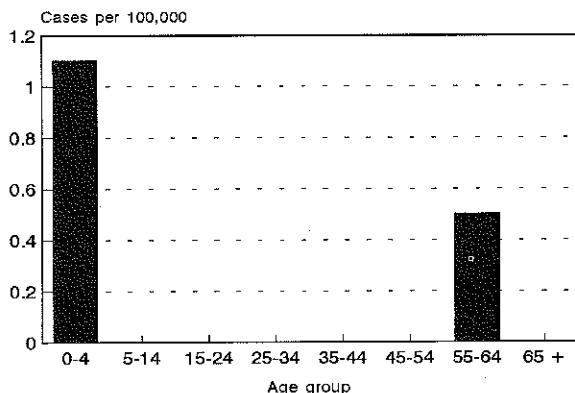
Haemophilus influenzae meningitis rate by year - Kansas, 1983-1994



Haemophilus influenzae meningitis cases by county - Kansas, 1994



Haemophilus influenzae meningitis rate by age group - Kansas, 1994



Hantavirus Pulmonary Syndrome

Number of cases - 4

% change since 1993 - plus 300%

Kansas rate - 0.2 per 100,000

U.S. rate (1993) - < 0.1 per 100,000

Age of case-patients

- Median - 24

- Range - 18 to 46 years

Rate by sex

- Female - 0.1 per 100,000

- Male - 0.2 per 100,000

Rate by race

- White - 0.1 per 100,000

- Black - 0 per 100,000

- Asian - 0 per 100,000

- Am. Indian - 0 per 100,000

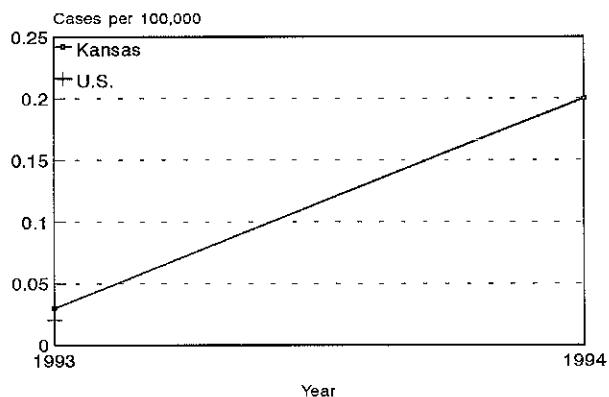
Rate by geographic area

- Urban - 0 per 100,000

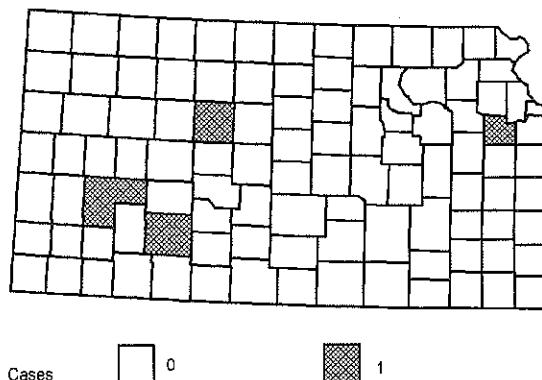
- Rural - 0.2 per 100,000

Comment: Three cases were diagnoses of past illness; one from 1993 and two from 1983. A total of 5 cases have ever been reported in Kansas.

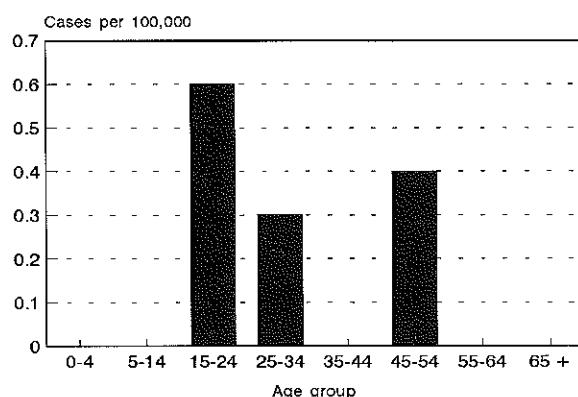
Hantavirus rate by year
Kansas, 1993-1994



Hantavirus cases by county
Kansas, 1994



Hantavirus rate by age group
Kansas, 1994



Hepatitis A

Number of cases - 111

% change from 1993 - plus 41%

Kansas rate - 4.4 per 100,000

U.S. rate (1993) - 9.4 per 100,000

Age of case-patients

Median - 26 years

Range - < 1 to 99 years

Rate by sex

Female - 4.1 per 100,000

Male - 4.7 per 100,000

Rate by race

White - 4.4 per 100,000

Black - 3.5 per 100,000

Asian - 3.2 per 100,000

Am. Indian - 13.7 per 100,000

Rate by geographic area

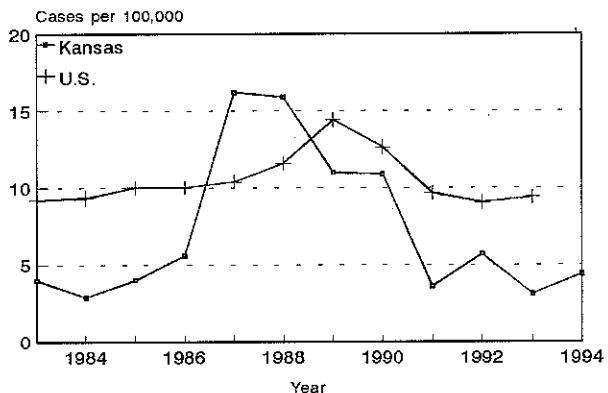
Urban - 5.2 per 100,000

Rural - 3.7 per 100,000

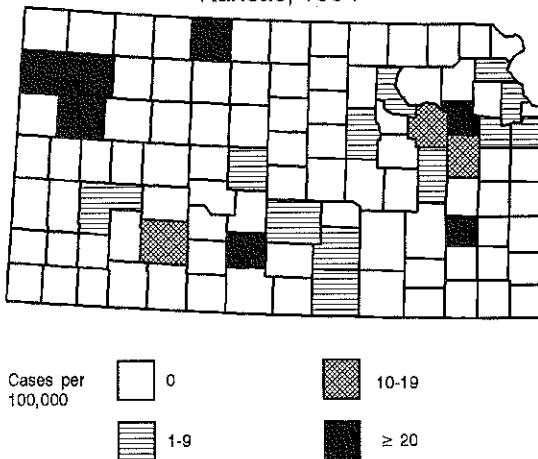
Risk factors: (during 2-6 weeks prior to illness)

Contact of hepatitis A case	42	(38%)
Foreign travel	11	(10%)

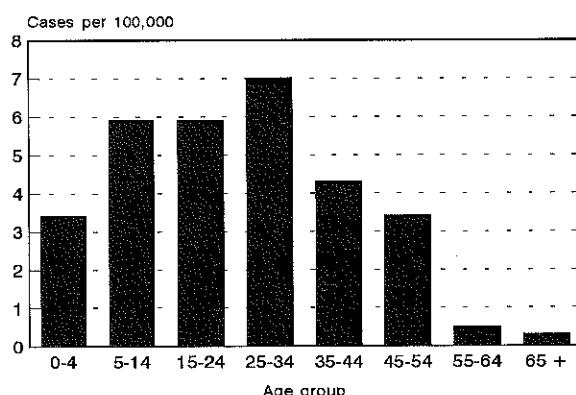
Hepatitis A rate by year
Kansas, 1983-1994



Hepatitis A rate by county
Kansas, 1994



Hepatitis A rate by age group
Kansas, 1994



Hepatitis B

Number of cases - 31

% change from 1993 - minus 48%

Kansas rate - 1.2 per 100,000

U.S. rate (1993) - 5.2 per 100,000

Age of case-patients

Median - 30 years

Range - 3 to 50 years

Rate by sex

Female - 1.1 per 100,000

Male - 1.4 per 100,000

Rate by race

White - 1.2 per 100,000

Black - 2.1 per 100,000

Asian - 3.2 per 100,000

Am. Indian - 0 per 100,000

Rate by geographic area

Urban - 1.9 per 100,000

Rural - 0.6 per 100,000

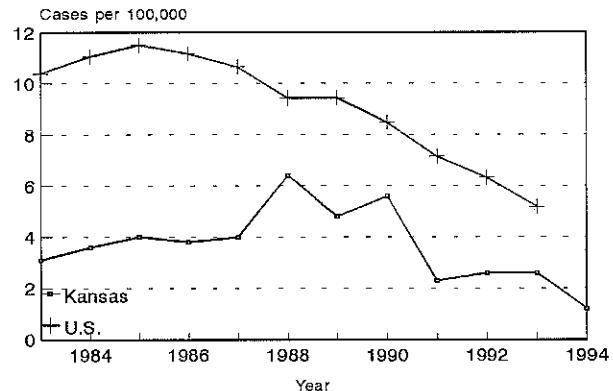
Cases who had received 3 doses of the hepatitis B vaccine 1 (3%)

Risk factors

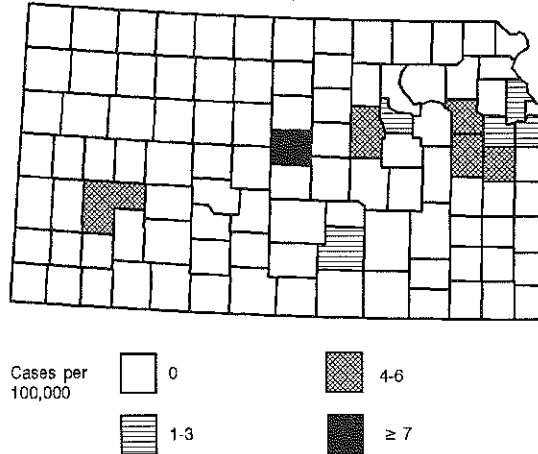
(6 weeks - 6 months prior to illness)

> 2 sexual partners	23	(74%)
Contact of hepatitis B case	6	(19%)
Tattoo	3	(10%)
Injecting drug use	2	(7%)

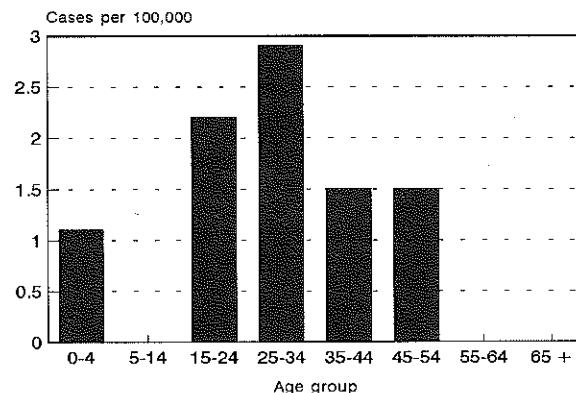
Hepatitis B rate by year
Kansas, 1983-1994



Hepatitis B rate by county
Kansas, 1994



Hepatitis B rate by age group
Kansas, 1994



Pediatric Lead Poisoning

Number of cases - 1,034

% change from 1993 - plus 46%

Kansas rate - 40.9 per 100,000

U.S. rate (1993) - not available

Age of case-patients

Median - 36 months

Range - 6 to 71 months

Rate by sex

Female - 34.2 per 100,000

Male - 41.3 per 100,000

Rate by race - not available

Rate by ethnicity - not available

Rate by geographic area

Urban - 4.4 per 100,000

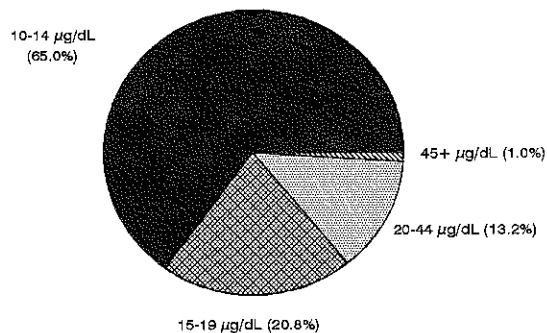
Rural - 52.1 per 100,000

Comment: Lead poisoning was defined as a blood lead level $\geq 10 \mu\text{g}/\text{dL}$.

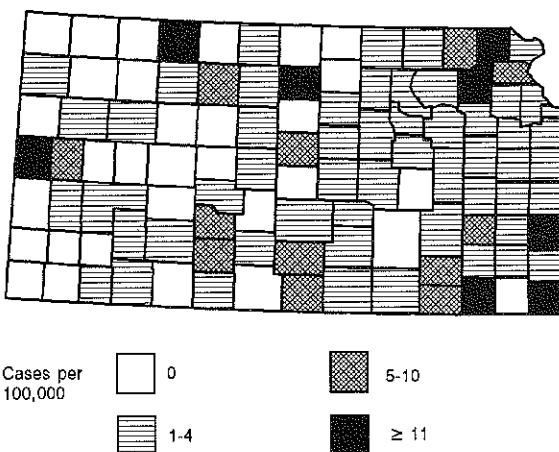
In 1993, only results from the state laboratory were analyzed.
In 1994, results from both private and public laboratories were analyzed.

Differences in rates by geographic area are largely attributable, at present, to variations in screening practices.

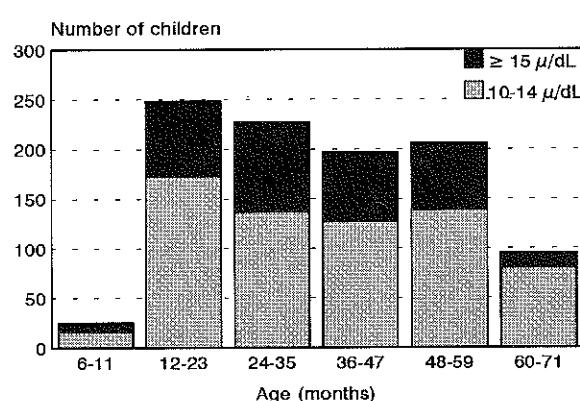
Blood lead results for children 6 to 71 months
Kansas, 1994



Pediatric lead poisoning rate by county
Kansas, 1994



Pediatric lead poisoning by age group
Kansas, 1994



Legionellosis

Number of cases - 6

% change from 1993 - minus 14%

Kansas rate - 0.2 per 100,000

U.S. rate (1993) - 0.5 per 100,000

Age of case-patients

Median - 64 years

Range - 47 to 90 years

Rate by sex

Female - 0.2 per 100,000

Male - 0.2 per 100,000

Rate by race

White - 0.3 per 100,000

Black - 0 per 100,000

Asian - 0 per 100,000

Am. Indian - 0 per 100,000

Rate by geographic area

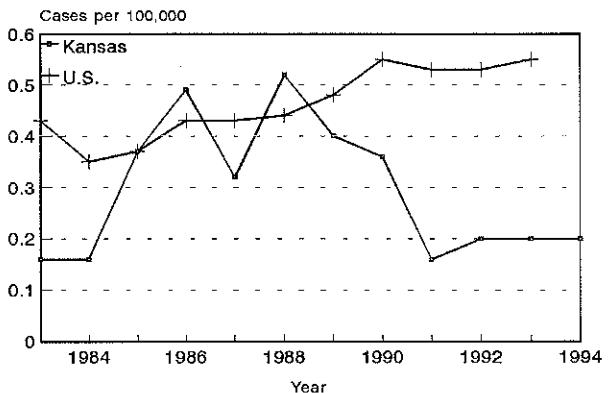
Urban - 0.5 per 100,000

Rural - 0 per 100,000

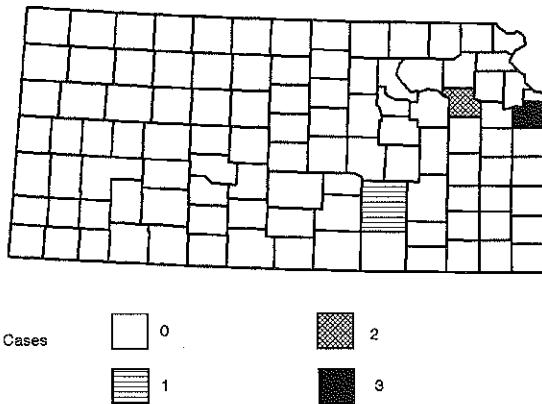
Underlying disease at date of onset

Smoker	3 (50%)
Systemic corticosteroids	2 (33%)
Cancer	2 (33%)
Other immunosuppressants	1 (17%)
Diabetes	1 (17%)
Renal dialysis	1 (17%)
Renal transplant	1 (17%)

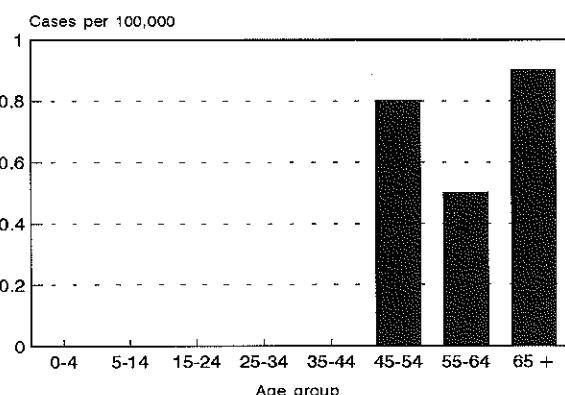
Legionellosis rate by year
Kansas, 1983-1994



Legionellosis cases by county
Kansas, 1994



Legionellosis rate by age group
Kansas, 1994



Lyme Disease

Number of cases - 17

% change from 1993 - minus 69%

Kansas rate - 0.7 per 100,000

U.S. rate (1993) - 3.2 per 100,000

Age of case-patients

Median - 33 years

Range - 11 to 65 years

Rate by sex

Female - 0.6 per 100,000

Male - 0.7 per 100,000

Rate by race

White - 0.7 per 100,000

Black - 0.7 per 100,000

Asian - 0 per 100,000

Am. Indian - 0 per 100,000

Site of likely exposure

Kansas	7 (41%)
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Out of state	7 (41%)
--------------	---------

Unknown	3 (18%)
---------	---------

Clinical characteristics

Erythema migrans	6 (35%)
------------------	---------

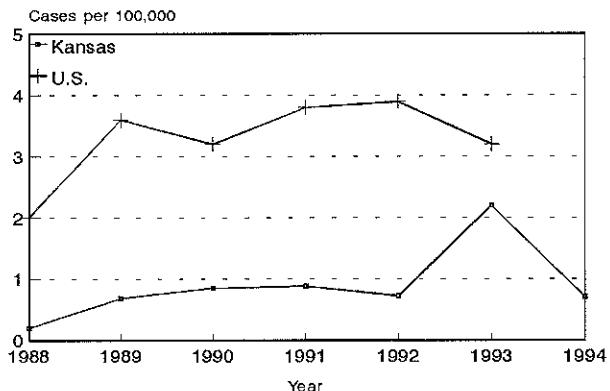
Rheumatic signs	13 (77%)
-----------------	----------

Neurologic signs	5 (29%)
------------------	---------

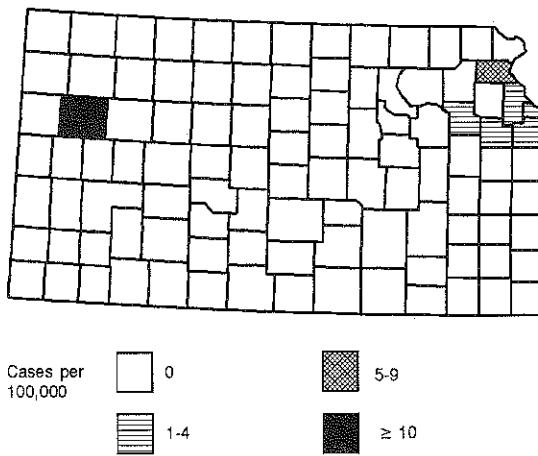
Cardiac signs	0 (0%)
---------------	---------

Comment: The spirochete (*Borrelia burgdorferi*) that causes Lyme disease has not yet been isolated by culture in Kansas.

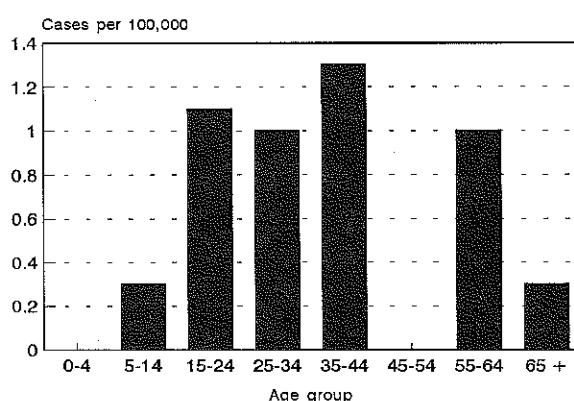
Lyme disease rate by year
Kansas, 1988-1994



Lyme disease rate by county
Kansas, 1994



Lyme disease rate by age group
Kansas, 1994



Malaria

Number of cases - 7

% change from 1993 - plus 133%

Kansas rate - 0.1 per 100,000

U.S. rate (1993) - 3.2 per 100,000

Age of case-patients

Median - 39 years

Range - 7 to 60 years

Rate by sex

Female - 0.2 per 100,000

Male - 0.3 per 100,000

Rate by race

White - < 0.1 per 100,000

Black - 2.8 per 100,000

Asian - 3.2 per 100,000

Am. Indian - 0 per 100,000

Country of recent travel

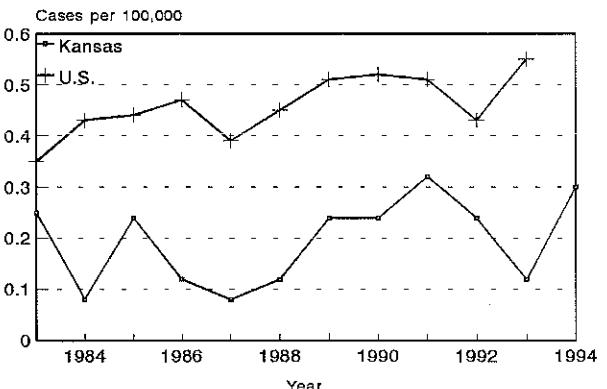
Haiti 1

India 1

Nigeria 3

Rwanda 2

Malaria rate by year
Kansas, 1983-1994



U.S. citizen

Yes 4

No 2

Unknown 1

Malaria species

P. vivax 3

P. falciparum 2

Unknown 2

Prophylaxis

Chloroquine 1

None 4

Unknown 2

Comment: The individual taking chloroquine was traveling in a country with chloroquine-resistant malaria.

Measles

Number of cases - 1

% change from 1993 - minus 50%

Kansas rate - < 0.1 per 100,000

U.S. rate (1993) - 0.1 per 100,000

Age of case-patient - 20 years

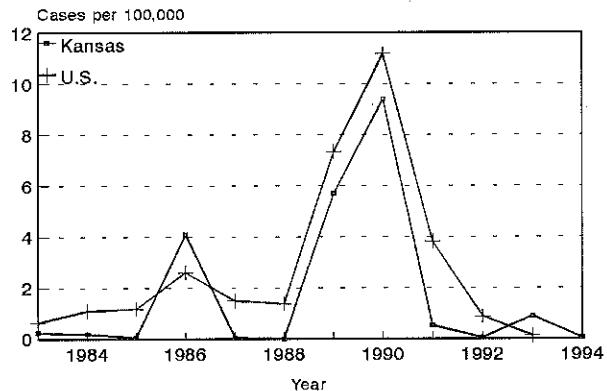
Rate by geographic area

Urban - 0 per 100,000

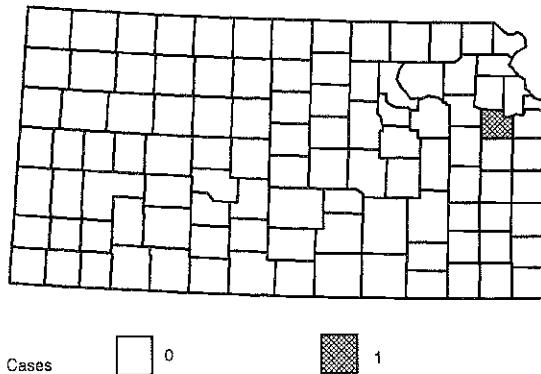
Rural - 0.1 per 100,000

Comment: Children are to be immunized against measles at 12-15 months of age using the triple antigen vaccine (measles-mumps-rubella). State-supplied vaccine is available for a second dose for three different cohorts: school enterers (4-6 years), 11 year olds and persons 18 years old or enrolling in post-secondary school.

Measles rate by year
Kansas, 1983-1994



Measles cases by county
Kansas, 1994



Cases 0 1

Meningococcal Disease

Number of cases - 28

% change from 1993 - minus 22%

Kansas rate - 1.1 per 100,000

U.S. rate (1993) - 1.0 per 100,000

Age of case-patients

Median - 14 years

Range - < 1 to 86 years

Rate by sex

Female - 1.2 per 100,000

Male - 1.0 per 100,000

Rate by race

White - 0.9 per 100,000

Black - 1.4 per 100,000

Asian - 0 per 100,000

Am. Indian - 4.6 per 100,000

Rate by geographic area

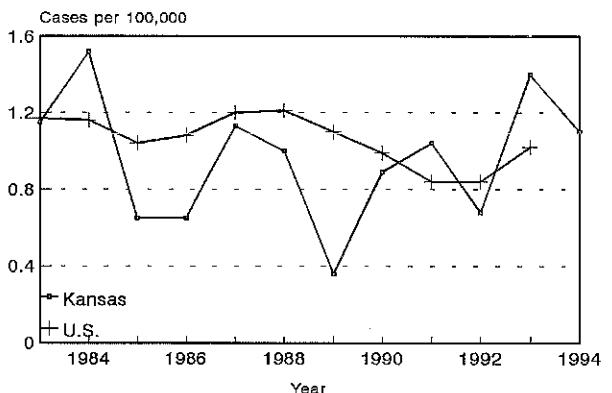
Urban - 0.3 per 100,000

Rural - 1.8 per 100,000

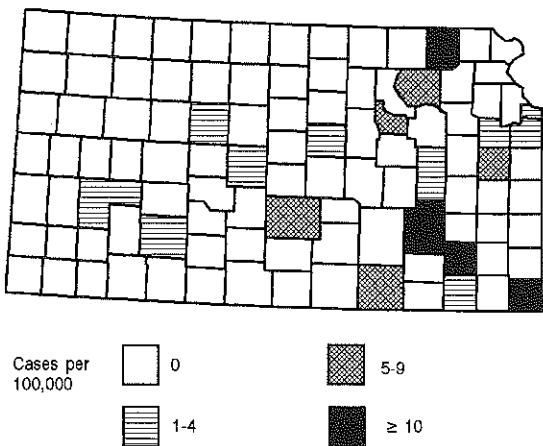
Serogroup

A	1	(4%)
B	2	(7%)
C	5	(18%)
Y	4	(14%)
Unknown	16	(57%)

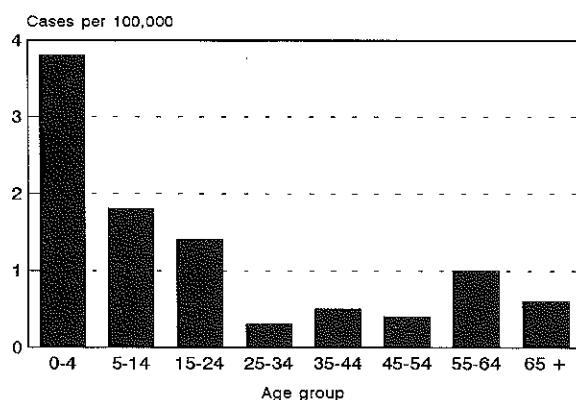
Meningococcal disease rate by year
Kansas, 1983-1994



Meningococcal rate by county
Kansas, 1994



Meningococcal disease rate by age group
Kansas, 1994



Mumps

Number of cases - 1

% change from 1993 - no change

Kansas rate - < 0.1 per 100,000

U.S. rate (1993) - 0.7 per 100,000

Age of case-patient - 13 years

Rate by sex

Female - 0.1 per 100,000

Male - 0 per 100,000

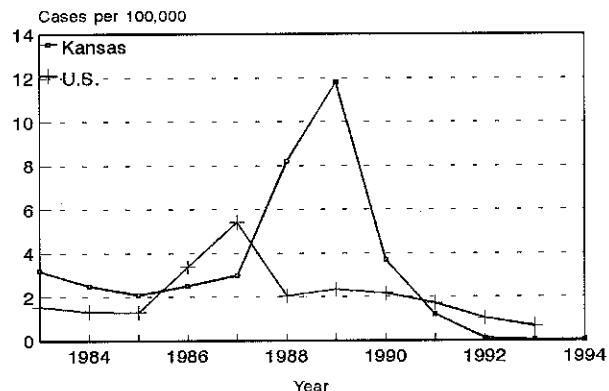
Rate by race - not available

Rate by geographic area

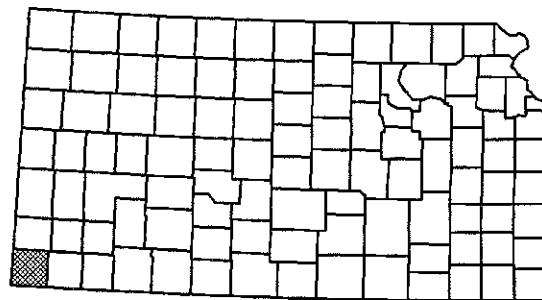
Urban - 0 per 100,000

Rural - 0.1 per 100,000

Mumps rate by year
Kansas, 1983-1994



Mumps cases by county
Kansas, 1994



Cases 0 1

Comment: Because patient was foreign born and immunization records were unavailable, vaccination status was unknown.

Pertussis

Number of cases - 18

% change from 1993 - minus 25%

Kansas rate - 0.7 per 100,000

U.S. rate (1993) - 2.6 per 100,000

Age of case-patients

Median - < 1 year

Range - < 1 to 10 years

Rate by sex

Female - 0.9 per 100,000

Male - 0.5 per 100,000

Rate by race

White - 0.8 per 100,000

Black - 0.7 per 100,000

Asian - 0 per 100,000

Am. Indian - 0 per 100,000

Rate by geographic area

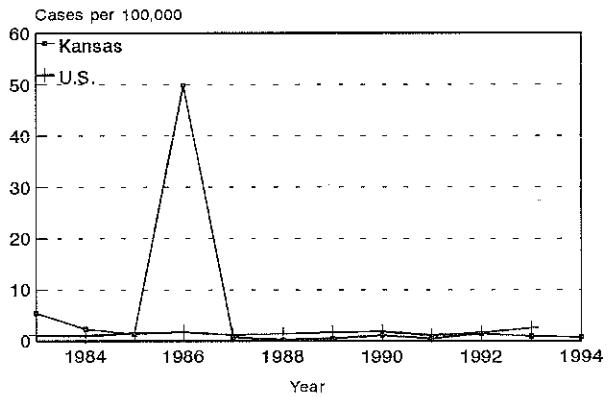
Urban - 1.1 per 100,000

Rural - 0.4 per 100,000

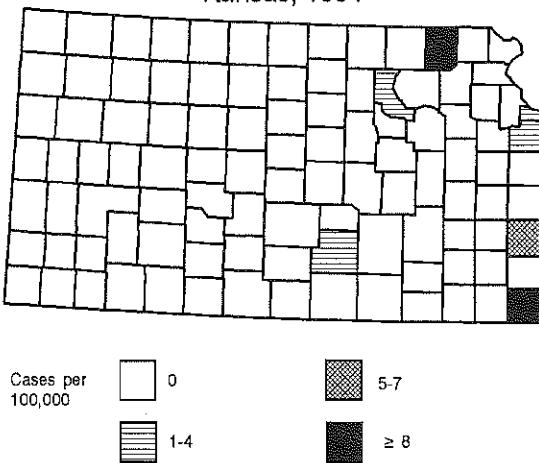
Vaccination status of cases

No history of vaccine	6 (33%)
Too young for vaccine (< 2 mo.)	6 (33%)
Previous DPT, but not up-to-date	2 (11%)
Up-to-date	2 (11%)
Unknown	2 (11%)

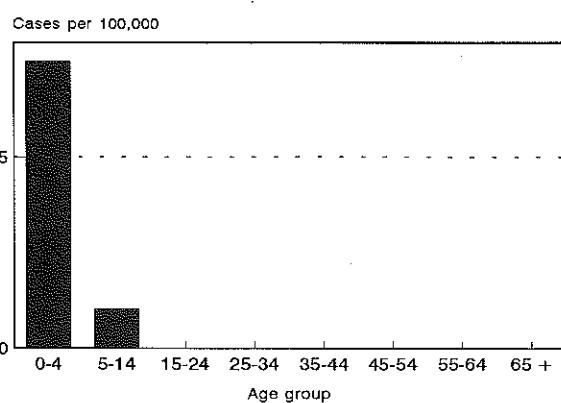
Pertussis rate by year
Kansas, 1983-1994



Pertussis rate by county
Kansas, 1994



Pertussis rate by age group
Kansas, 1994



Rabies, Animal

Number of cases - 35

% change from 1993 - minus 56%

Number of counties reporting rabid animals - 17 (16%)

Types of rabid animals

Wild 30 (86%)

Domestic 5 (14%)

Pets 4

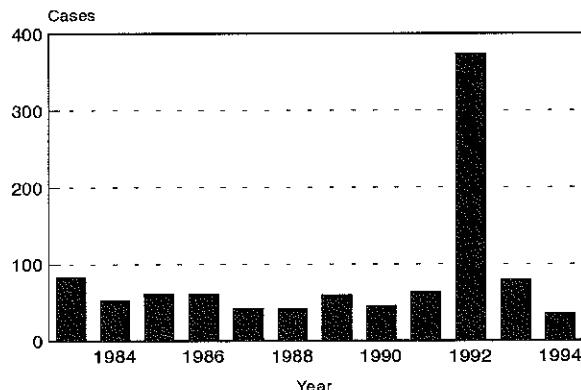
Livestock 1

Rabies was not found in the following species (number of animals tested):

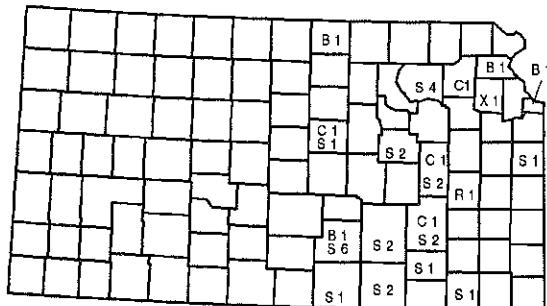
Beaver (3), Bobcat (7), Coyote (11),
Deer (1), Dog (649), Donkey (3),
Ferret (15), Fox (8), Goat (2), Horse (20),
Lion (1), Llama (1), Opossum (20),
Rabbit (7), Rodent (61), Squirrel (36)
Wolf (2)

Comment: The last human case of rabies in Kansas occurred in Montgomery County in 1968.

Animal rabies by year
Kansas, 1983-1994



Animal rabies by species and county
Kansas, 1994



B=bat C=cat R=raccoon S=skunk X=cow

Rabid animals by species
Kansas, 1994

Species	Number Tested	Number Positive	Percent Positive
Bat	53	4	7.5
Cat	547	4	0.7
Cow	51	1	2.0
Raccoon	115	1	0.9
Skunk	102	25	24.5

Rocky Mountain Spotted Fever

Number of cases - 4

% change from 1993 - plus 300%

Kansas rate - 0.2 per 100,000

U.S. rate (1993) - 0.2 per 100,000

Age of case-patients

Median - 32 years

Range - 14 to 53 years

Rate by sex

Female - 0.2 per 100,000

Male - 0.1 per 100,000

Rate by race

White - 0.2 per 100,000

Black - 0 per 100,000

Asian - 0 per 100,000

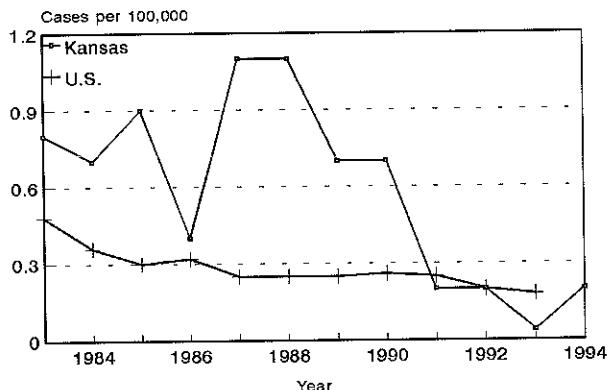
Am. Indian - 0 per 100,000

Rate by geographic area

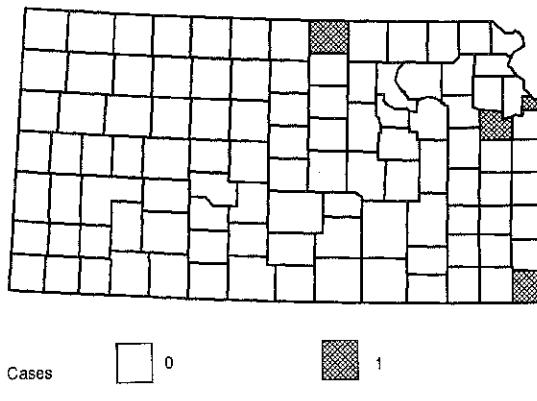
Urban - 0.2 per 100,000

Rural - 0.1 per 100,000

Rocky Mountain Spotted Fever rate
by year - Kansas, 1983-1994

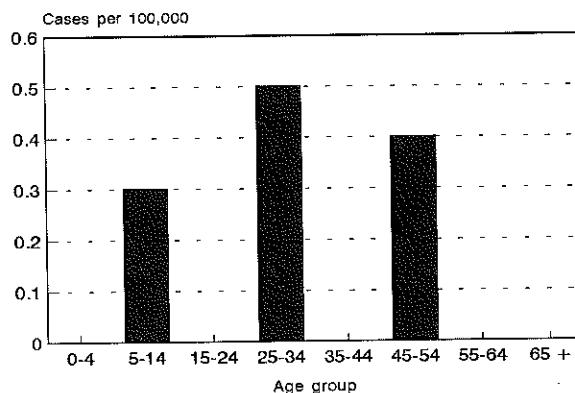


Rocky Mountain Spotted Fever cases by county - Kansas, 1994



Cases 0 1

Rocky Mountain Spotted Fever rate
by age group - Kansas, 1994



Salmonellosis

Number of cases - 397

% change from 1993 - plus 33%

Kansas rate - 15.5 per 100,000

U.S. rate (1993) - 16.2 per 100,000

Age of case-patients

Median - 18 years

Range - < 1 to 94 years

Rate by sex

Female - 14.0 per 100,000

Male - 17.5 per 100,000

Rate by race - not available

Rate by geographic area

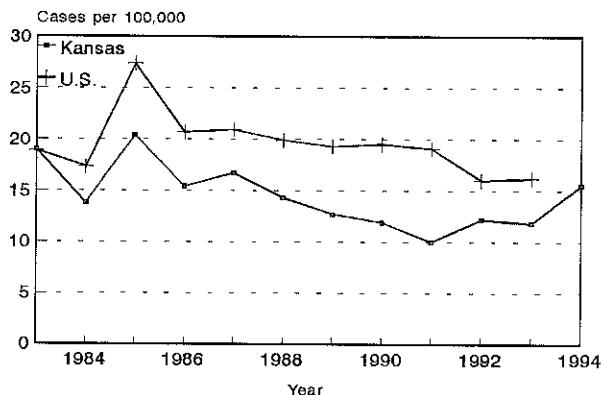
Urban - 16.2 per 100,000

Rural - 15.0 per 100,000

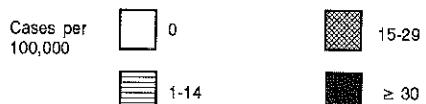
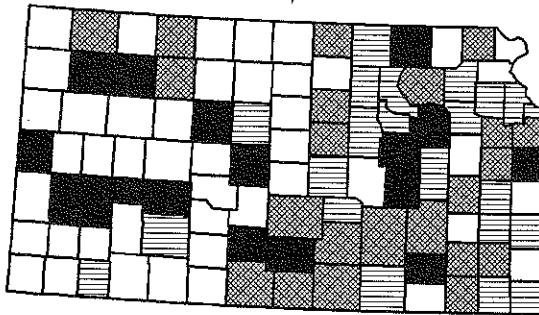
Serotypes identified by state lab

S. typhimurium	107	(27%)
S. enteritidis	61	(15%)
S. newport	38	(10%)
S. heidelberg	12	(3%)
S. brandenburg	11	(3%)
S. hadar	8	(2%)
S. muenchen	8	(2%)
S. thompson	7	(2%)
S. montevideo	6	(2%)
S. norwich	6	(2%)
S. javiana	5	(1%)
Other	65	(16%)
Unknown	86	(22%)

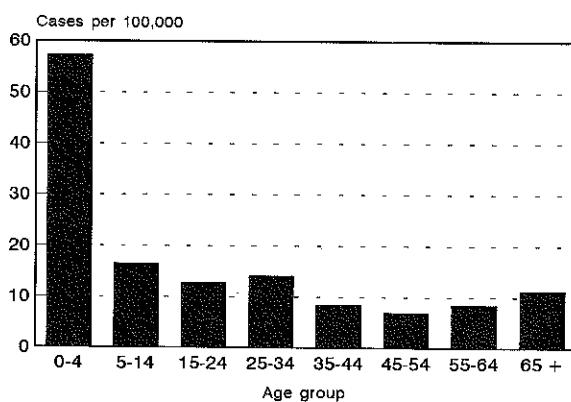
Salmonellosis rate by year
Kansas, 1983-1994



Salmonellosis rate by county
Kansas, 1994



Salmonellosis rate by age group
Kansas, 1994



Shigellosis

Number of cases - 123

% change from 1993 - minus 41%

Kansas rate - 4.8 per 100,000

U.S. rate (1993) - 12.5 per 100,000

Age of case-patients

Median - 7 years

Range - < 1 year to 75 years

Rate by sex

Female - 6.0 per 100,000

Male - 3.7 per 100,000

Rate by race - not available

Rate by geographic area

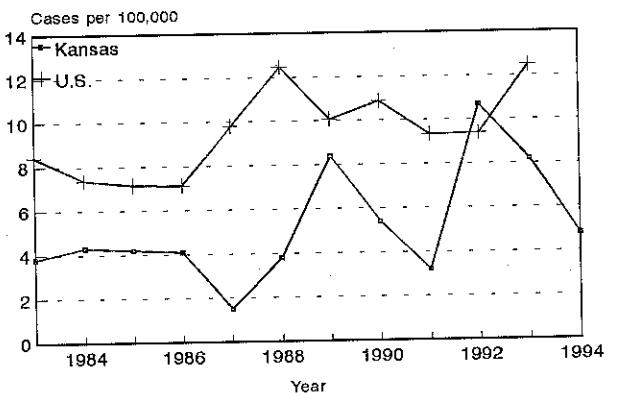
Urban - 6.2 per 100,000

Rural - 3.7 per 100,000

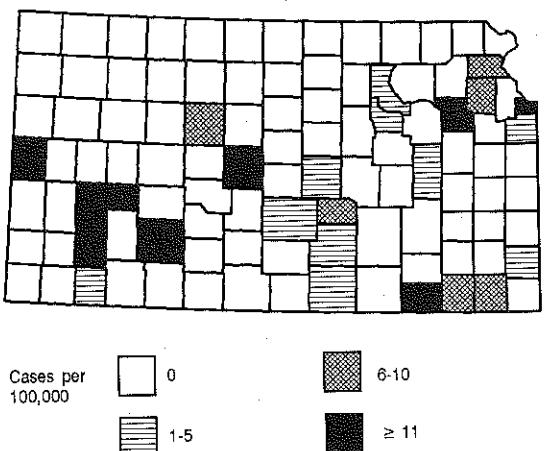
Species isolated by state lab

S. sonnei	72	(59%)
S. flexneri	7	(6%)
S. boydii	1	(1%)
Unknown	43	(35%)

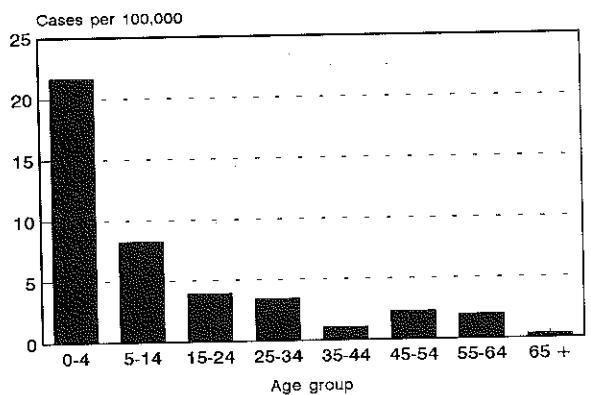
Shigellosis rate by year
Kansas, 1983-1994



Shigellosis rate by county
Kansas, 1994



Shigellosis rate by age group
Kansas, 1994



Syphilis, Primary and Secondary

Number of cases - 74

% change from 1993 - minus 43%

Kansas rate - 2.9 per 100,000

U.S. rate (1993) - 10.4 per 100,000

Age of case-patients

Median - 26 years

Rate by sex

Female - 3.2 per 100,000

Male - 2.7 per 100,000

Rate by race

White - 0.4 per 100,000

Black - 44.7 per 100,000

Asian - 0 per 100,000

Am. Indian - 0 per 100,000

Rate by ethnicity

Hispanic - 2.1 per 100,000

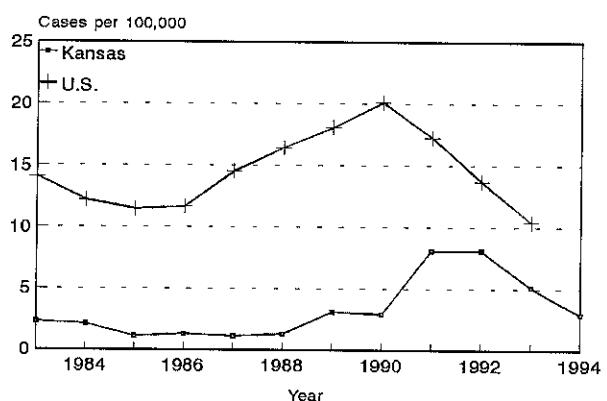
Non Hispanic - 3.0 per 100,000

Rate by geographic area

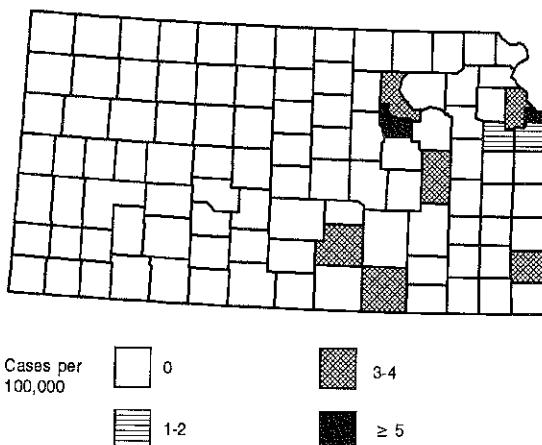
Urban - 5.5 per 100,000

Rural - 0.9 per 100,000

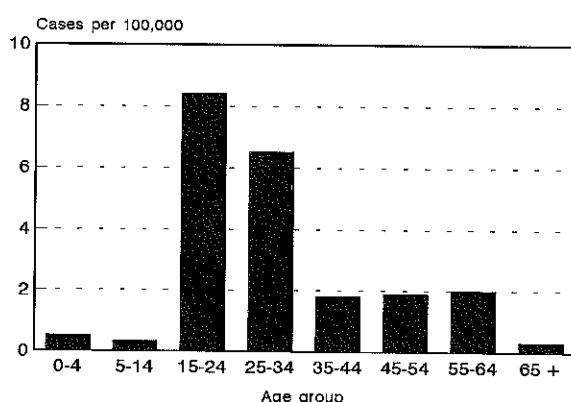
Primary and secondary syphilis rate
by year - Kansas, 1983-1994



Primary and secondary syphilis rate by county
Kansas, 1994



Primary and secondary syphilis rate
by age group - Kansas, 1994



Tetanus

Number of cases - 1

% change from 1993 - minus 50%

Kansas rate - < 0.1 per 100,000

U.S. rate (1993) - 0.02 per 100,000

Age of case-patient - 24 years

Rate by sex

Female - 0 per 100,000

Male - 0.1 per 100,000

Rate by race

White - < 0.1 per 100,000

Black - 0 per 100,000

Asian - 0 per 100,000

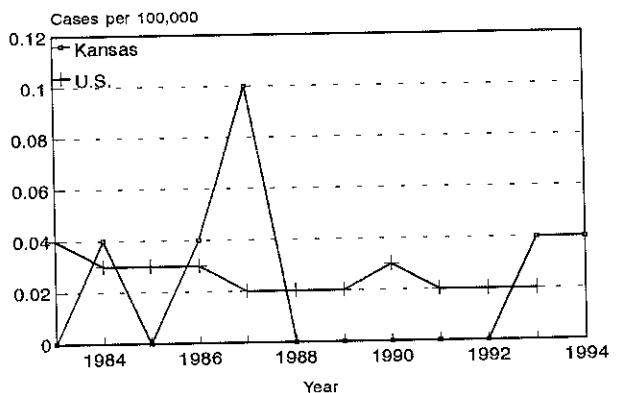
Am. Indian - 0 per 100,000

Rate by geographic area

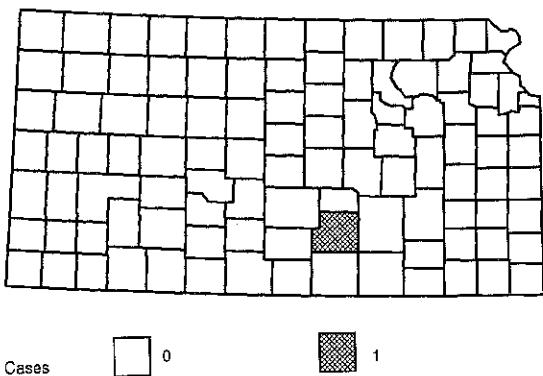
Urban - 0.1 per 100,000

Rural - 0 per 100,000

Tetanus rate by year
Kansas, 1983-1994



Tetanus cases by county
Kansas, 1994



Toxic Shock Syndrome

Number of cases - 5

% change from 1993 - plus 67%

Kansas rate - 0.2 per 100,000

U.S. rate (1993) - 0.1 per 100,000

Age of case-patients

Median - 31 years

Range - 17 to 37 years

Rate by sex

Female - 0.4 per 100,000

Male - 0 per 100,000

Rate by race

White - 0.2 per 100,000

Black - 0 per 100,000

Asian - 0 per 100,000

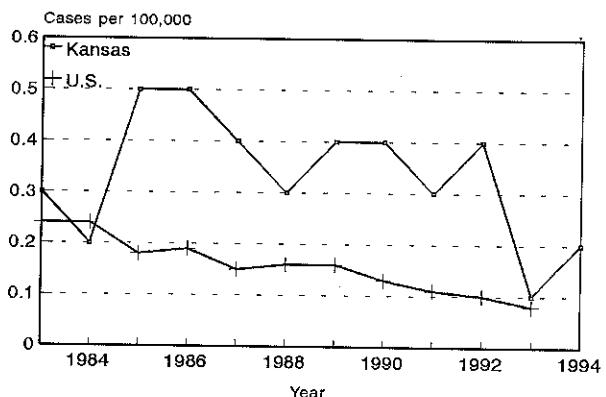
Am. Indian - 0 per 100,000

Rate by geographic area

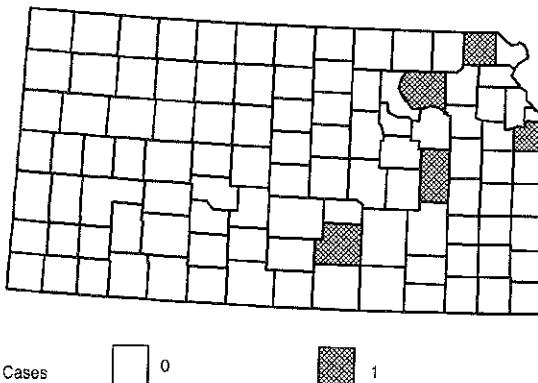
Urban - 0.2 per 100,000

Rural - 0.2 per 100,000

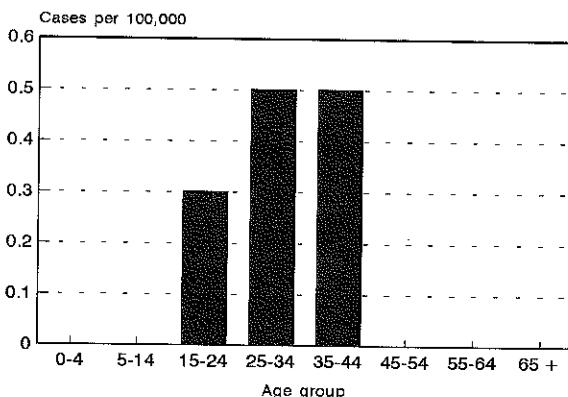
Toxic Shock Syndrome rate by year
Kansas, 1983-1994



Toxic Shock Syndrome cases by county
Kansas, 1994



Toxic Shock Syndrome rate by age group
Kansas, 1994



Tuberculosis

Number of cases - 84

% change from 1993 - plus 1%

Kansas rate - 3.4 per 100,000

U.S. rate (1993) - 9.8 per 100,000

Age of case-patients

Median - 37 years

Range - 1 to 93 years

Rate by sex

Female - 2.3 per 100,000

Male - 4.4 per 100,000

Rate by race

White - 1.6 per 100,000

Black - 5.6 per 100,000

Asian - 69.3 per 100,000

Am. Indian - 0 per 100,000

Rate by ethnicity

Hispanic - 17.0 per 100,000

Non Hispanic - 2.8 per 100,000

Rate by geographic area

Urban - 4.3 per 100,000

Rural - 2.5 per 100,000

Site of infection

Pulmonary 71 (85%)

Extra-pulmonary 13 (15%)

Drug resistance

No drug resistance 64 (76%)

Streptomycin 5 (6%)

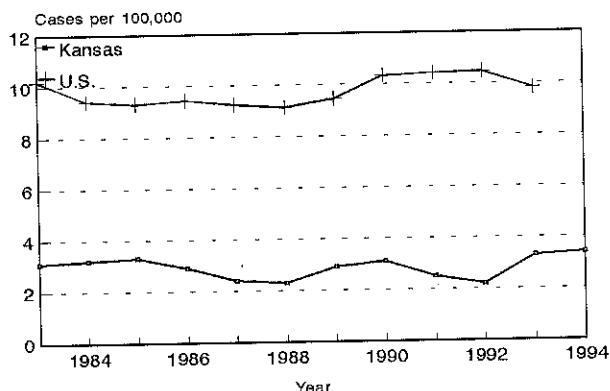
Isoniazid 3 (4%)

Pyrazinamide 1 (1%)

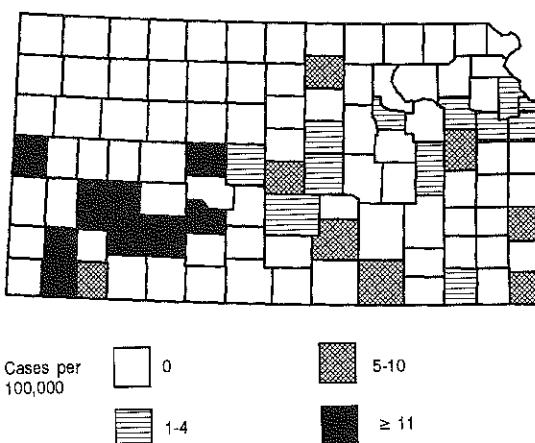
All first-line drugs 1 (1%)

Unknown 10 (12%)

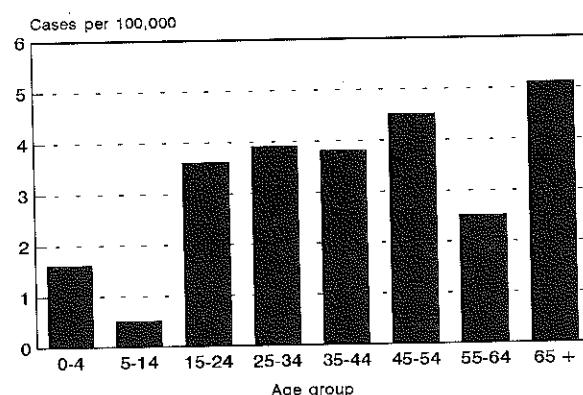
Tuberculosis rate by year
Kansas, 1983-1994



Tuberculosis rate by county
Kansas, 1994



Tuberculosis rate by age group
Kansas, 1994



Tularemia

Number of cases - 7

% change from 1993 - plus 33%

Kansas rate - 0.3 per 100,000

U.S. rate (1993) - 0.1 per 100,000

Age of case-patients

Median - 57 years

Range - 7 to 71 years

Rate by sex

Female - 0.1 per 100,000

Male - 0.5 per 100,000

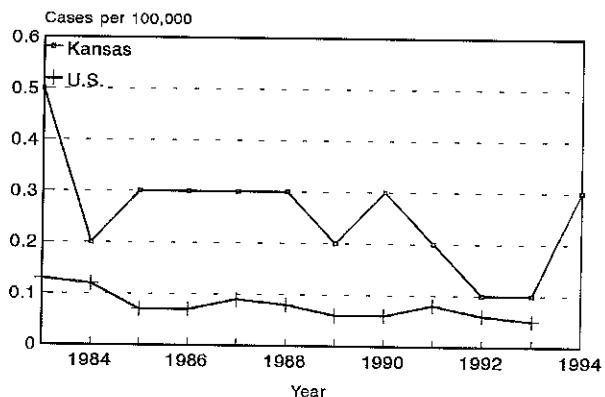
Rate by race - not available

Rate by geographic area

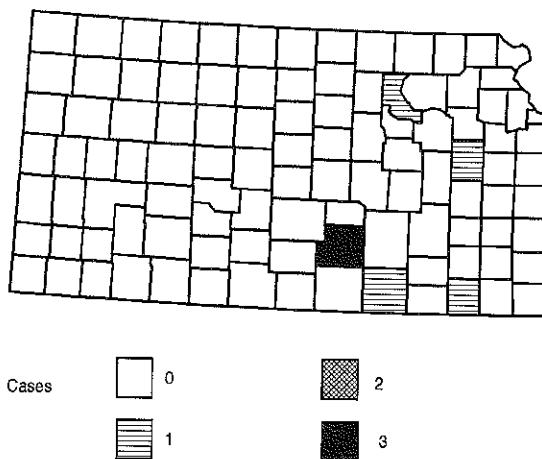
Urban - 0.3 per 100,000

Rural - 0.2 per 100,000

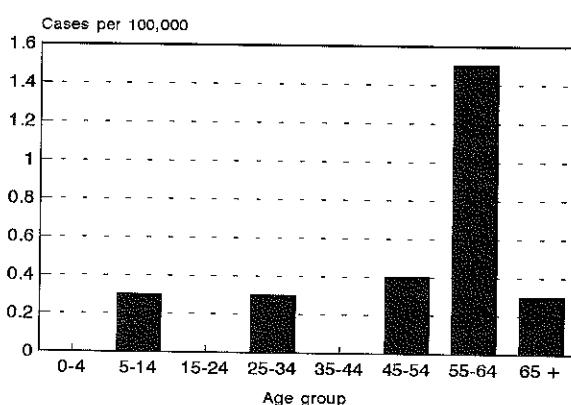
Tularemia rate by year
Kansas, 1983-1994



Tularemia cases by county
Kansas, 1994



Tularemia rate by age group
Kansas, 1994



Yersiniosis

Number of cases - 2

% change from 1993 - plus 100%

Kansas rate - 0.1 per 100,000

U.S. rate (1993) - not available

Age of case-patients

Median - < 1 year

Range - < 1 year to 1 year

Rate by sex

Female - 0.2 per 100,000

Male - 0 per 100,000

Rate by race

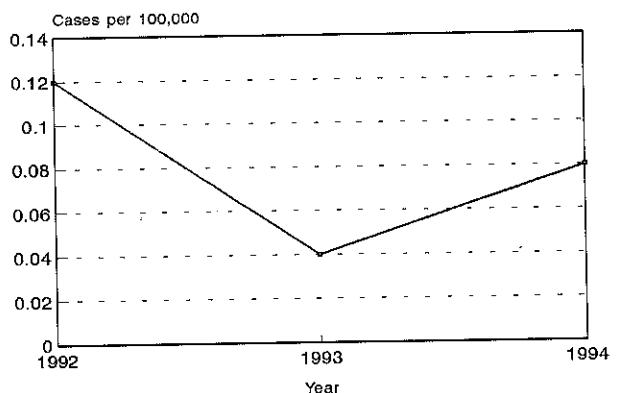
White - < 0.1 per 100,000

Black - 0.7 per 100,000

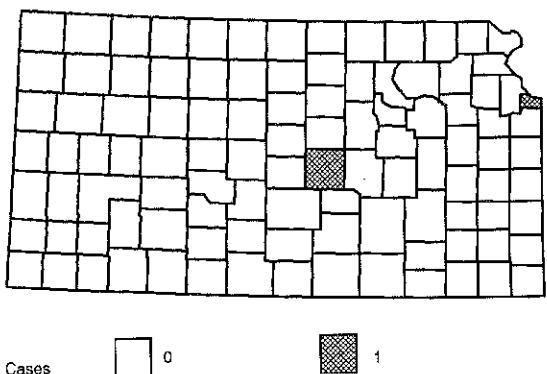
Asian - 0 per 100,000

Am. Indian - 0 per 100,000

**Yersiniosis rate by year
Kansas, 1992-1994**



**Yersiniosis cases by county
Kansas, 1994**



Rate by geographic area

Urban - 0.1 per 100,000

Rural - 0.1 per 100,000

SECTION II

TABLES

Table 1. List of reportable diseases in Kansas, 1994

Reportable by physicians, dentists, physician's assistants, social workers, teachers and school administrators (K.A.R. 28-1-2 effective April 19, 1993 and 28-1-22 effective December 24, 1990)

- Acquired Immune Deficiency Syndrome (AIDS)
- Amebiasis
- Anthrax
- Botulism
- Brucellosis
- Campylobacteriosis
- Chancroid
- Chickenpox (varicella)
- Chlamydia species infections, including psittacosis
- Cholera
- Diphtheria
- Encephalitis, infectious
- Giardiasis
- Gonorrhea
- Granuloma inguinale
- Hepatitis, viral
- Human Immunodeficiency Virus (HIV) - reportable by physicians only
- Legionellosis
- Leprosy (Hansen's disease)
- Leptospirosis
- Lyme disease
- Lymphogranuloma venereum
- Malaria
- Measles (rubeola)
- Meningitis
- Mumps
- Pertussis (whooping cough)
- Plague
- Poliomyelitis
- Rabies
- Rheumatic fever
- Rocky Mountain Spotted Fever
- Rubella, including congenital rubella syndrome
- Salmonellosis, including typhoid fever
- Shigellosis
- Syphilis, including congenital syphilis
- Tetanus

- Toxic shock syndrome
- Trichinosis
- Tuberculosis
- Tularemia
- Typhus, murine
- Urethritis, other than gonococcal or chlamydial
- Vaginitis, non-specific
- Yellow Fever

Reportable by laboratories (K.A.R. 28-1-18 effective August 16, 1993 and 28-1-22 effective December 24, 1990)

- Blood lead level \geq 10 $\mu\text{g}/\text{dL}$ for persons < 18 years of age, and \geq 25 $\mu\text{g}/\text{dL}$ for persons \geq 18 years of age
- CD4+ T-lymphocyte count of less than 200/ml or a CD4+ T-lymphocyte percent of total lymphocytes less than 14
- Chlamydia
- Gonorrhea
- Human Immunodeficiency Virus (HIV)
- Syphilis
- Tuberculosis

Reportable by hospitals (K.A.R. 28-1-4 effective May 1, 1986 and 28-1-22 effective December 24, 1990)

- Acquired Immune Deficiency Syndrome (AIDS)
- Cancer
- Congenital malformations in infants under one year of age
- Fetal alcohol syndrome
- Guillain-Barre Syndrome
- Reye syndrome
- Toxic shock syndrome

Table 2. Cases of reportable diseases by year in Kansas, 1983-1994

DISEASE	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
AIDS	3	2	16	35	48	102	101	134	93	188	358	227
AMEBIASIS	30	11	29	22	49	36	19	4	1	1	22	15
ANTHRAX	0	0	0	0	0	0	0	0	0	0	0	0
BOTULISM, FOODBORNE	0	0	0	0	0	0	0	0	0	0	0	0
BOTULISM, INFANT	0	1	0	0	0	1	0	0	0	1	0	2
BOTULISM, OTHER	0	0	0	0	0	0	0	0	1	0	0	0
BRUCELLOSIS	2	2	2	1	0	0	1	1	0	0	0	0
CAMPYLOBACTERIOSIS	83	133	208	137	167	218	224	185	200	253	201	247
CHANCREOID	0	0	0	0	4	1	1	13	5	3	1	5
CHICKENPOX	68556	10295	9069	10367	8310	346	494	3253	3367	4179	1687	3190
CHLAMYDIA	-	600	1124	1522	3042	3701	3772	5218	6791	7024	5694	6393
CHOLERA	0	0	0	0	0	1	0	0	0	0	0	0
DIPHTHERIA	0	0	0	0	0	0	0	0	0	0	0	0
E. COLI 0157:H7	-	-	-	-	-	-	-	2	4	4	11	25
ENCEPHALITIS, PRIMARY	4	8	6	2	12	9	6	13	5	5	7	7
ENCEPHALITIS, SLB	0	0	0	0	2	0	0	0	0	0	0	0
ENCEPHALITIS, WEE	0	0	0	0	0	1	0	0	0	0	0	0
GIARDIASIS	494	577	646	537	659	561	419	380	309	521	385	415
GONORRHEA	7920	7217	7006	6617	4482	4852	5183	4673	4637	4404	3710	3682
GRANULOMA INGUINALE	0	0	0	1	0	0	0	0	0	0	0	0
HANSEN'S DISEASE	1	0	1	2	0	1	0	0	0	0	0	0
HANTAVIRUS PULM. SYN.	-	-	-	-	-	-	-	-	-	-	1	4
HEPATITIS A	96	70	97	137	402	396	276	271	89	141	79	111
HEPATITIS B	74	87	97	94	99	159	121	139	56	66	65	31
HEPATITIS NON-A NON-B	10	17	28	18	19	17	18	40	20	16	16	3
LEAD ≥ 10 µg/dL	-	-	-	-	-	-	-	-	-	-	545	1034

Table 2. Cases of reportable diseases by year in Kansas, 1983-1994

DISEASE	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
LEGIONELLOSIS	4	1	9	12	8	13	10	9	4	5	7	6
LEPTOPIROSIS	0	0	0	0	1	0	0	0	0	0	0	0
LYME DISEASE	0	0	0	0	0	5	17	21	22	18	55	17
LYMPHOGRANULOMA VEN.	0	1	1	0	0	0	1	0	0	0	0	0
MALARIA	6	2	6	3	2	3	6	6	8	6	3	7
MEASLES	6	5	1	102	1	0	142	233	13	1	2	1
MENTINGITIS, ASEPTIC	107	51	58	64	93	64	110	69	73	114	202	79
MENTINGITIS, HIB	-	-	70	59	72	62	64	31	19	12	4	3
MENTINGOCOCCAL DISEASE	28	37	16	28	25	9	22	26	17	36	28	
MUMPS	77	62	51	61	74	205	297	91	31	3	1	1
PERTUSSIS	130	55	31	1229	17	6	12	27	12	34	24	18
PLAGUE	0	0	0	0	0	0	0	0	0	0	0	0
POLIOMYELITIS	0	0	0	0	0	0	0	-	0	0	0	0
PSITTACOSIS	3	0	1	0	0	0	0	1	0	1	0	0
RABIES, ANIMAL	82	53	63	63	33	39	58	45	63	374	79	35
RABIES, HUMAN	0	0	0	0	0	0	0	0	0	0	0	0
RHEUMATIC FEVER	3	4	1	6	11	10	6	1	2	0	3	1
RMSF	20	18	27	10	28	18	18	18	6	5	1	4
RUBELLA	36	30	7	9	1	2	2	0	1	4	0	0
RUBELLA, CONGENITAL	1	0	0	0	0	0	0	0	1	0	0	0
SALMONELLOSIS	462	339	501	379	413	358	318	295	245	304	299	397
SHIGELLOYSIS	92	106	104	102	36	94	211	135	79	266	208	123
SYPHILIS, P AND S	56	59	34	35	30	38	82	87	201	203	129	74
SYPHILIS, CONGENITAL	-	-	-	0	1	0	0	2	0	2	3	2
SYPHILIS, ALL STAGES	271	186	139	152	103	139	175	177	373	356	282	188
TETANUS	0	1	0	1	3	0	0	0	0	0	2	1

Table 2. Cases of reportable diseases by year in Kansas, 1983-1994

DISEASE	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
TOXIC SHOCK SYNDROME	8	4	12	12	9	8	10	11	8	9	3	5
TRICHINOSIS	0	0	0	0	0	0	0	6	0	0	0	0
TUBERCULOSIS	76	77	82	72	60	58	72	78	62	56	83	84
TULAREMIA	11	4	8	8	8	8	6	7	5	3	3	7
TYPHOID FEVER	2	1	0	1	1	1	2	1	0	1	1	2
TYPHUS	0	0	1	0	0	1	0	0	0	0	0	0
URETHRITIS	-	463	837	898	1097	788	726	908	1006	871	912	914
VAGINITIS	-	2299	3250	4000	5374	5175	5285	4977	3975	3426	3489	2944
YELLOW FEVER	0	0	0	0	0	0	0	0	0	0	0	0
YERSINIOSIS	-	-	-	-	-	-	-	-	-	3	1	2

Table 3. Cases of reportable diseases by county in Kansas, 1994

Table 3. Cases of reportable diseases by county in Kansas, 1994

AIDS													*	*	*
AMEBLIASIS													0	0	0
BOTULISM, INFANT													0	0	0
CAMPYLOBACTERIOSIS													0	1	0
CHANCROID													0	0	0
CHLAMYDIA													22	86	22
E. COLI 0157:H7													19	119	86
ENCEPHALITIS, PRIMARY													19	119	86
GIARDIASIS													4	19	4
GONORHEA													4	19	4
HANTAVIRUS PULM. SYND.													0	0	0
HEPATITIS A													0	0	0
HEPATITIS B													0	0	0
HEPATITIS NON-A NON-B													0	0	0
LEAD $\geq 10 \mu\text{g/dL}$													0	0	0
LEGIONELLOSIS													0	0	0
LYME DISEASE													0	0	0
MALARIA													0	0	0
MEASLES													0	0	0
MENTINGITIS, ASEPTIC													0	0	0
MENTINGITIS, HIB													0	0	0
MENTINGOCOCCAL DISEASE													0	0	0
MUMPS													0	0	0
PERTUSSIS													0	0	0
RABIES, ANIMAL													0	0	0
RHEUMATIC FEVER													0	0	0
RMSF													0	0	0
SalMONELLOSI													0	0	0
SHIGELLOSI													0	0	0
SYPHILLIS, P AND S													0	0	0
SYPHILLIS, CONGENITAL													0	0	0
SYPHILLIS, ALL STAGES													0	0	0
TETANUS													0	0	0
TOXIC SHOCK SYNDROME													0	0	0
TUBERCULOSIS													0	0	0
TULAREMIA													0	0	0
TYPHOID FEVER													0	0	0
URETHRITIS													0	0	0
VAGINITIS													0	0	0
YERSINIOSIS													0	0	0

Table 3. Cases of reportable diseases by county in Kansas, 1994

Table 3. Cases of reportable diseases by county in Kansas, 1994

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Table 3. Cases of reportable diseases by county in Kansas, 1994

Table 3. Cases of reportable diseases by county in Kansas, 1994

	SM	SN	ST	SU	SV	SW	TH	TR	WA	WB	WH	WL	WO	WS	WY	TOTAL
AIDS	*	22	*	*	*	*	*	*	*	*	*	*	*	*	*	32
AMEBLIASIS	0	0	0	0	0	2	0	0	0	0	0	0	0	1	15	
BOTULISM, INFANT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
CAMPYLOBACTERIOSIS	0	12	0	0	0	0	0	1	0	0	0	0	0	30	247	
CHANCROID	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	
CHLAMYDIA	1	600	6	20	1	37	14	5	6	1	0	2	3	0	1092	
E. COLI 0157:H7	0	1	0	0	0	1	0	0	0	0	0	0	1	2	25	
ENCEPHALITIS, PRIMARY	0	1	0	0	0	0	0	0	1	0	0	0	0	0	7	
GIARDIASIS	1	34	0	2	1	14	0	0	0	1	1	1	1	2	24	
GONORRHEA	1	545	1	8	0	7	1	1	0	0	0	0	1	1051	415	
HANTAVIRUS PULM. SYND.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3682	
HEPATITIS A	0	34	0	1	0	3	0	0	0	0	0	0	0	0	4	
HEPATITIS B	0	10	0	0	0	0	0	0	0	0	0	0	0	0	31	
HEPATITIS NON-A NON-B	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	
LEAD \geq 10 μ g/dL	2	✓	35	✓	16	0	0	0	0	0	0	0	0	0	1034	
LEGIONELLOSIS	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6	
LYME DISEASE	0	4	0	0	0	0	0	0	0	0	0	0	0	0	17	
MALARIA	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	
MEASLES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
MENINGITIS, ASEPTIC	0	3	0	0	0	0	0	0	0	0	0	0	0	14	79	
MENINGITIS, HIB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
MENINGOCOCCAL DISEASE	0	0	0	0	0	0	0	0	1	0	0	0	2	2	28	
MUMPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
PERTUSSIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	
RABIES, ANIMAL	0	0	0	0	0	0	0	0	0	0	0	0	0	1	35	
RHEUMATIC FEVER	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	
RMSF	0	21	0	6	0	2	2	0	0	2	0	0	1	20	397	
SALMONELLOYSIS	0	30	0	1	0	1	0	0	0	0	0	0	0	0	123	
SHIGELLOYSIS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74	
SYPHILIS, P AND S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SYPHILIS, CONGENITAL	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	
SYPHILIS, ALL STAGES	0	16	0	0	2	0	0	0	0	0	0	0	0	75	188	
TETANUS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
TOXIC SHOCK SYNDROME	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
TUBERCULOSIS	0	5	0	1	0	0	0	1	0	0	0	0	0	0	83	
TULAREMIA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
TYPHOID FEVER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
URETHRITIS	0	241	0	1	0	0	0	0	0	0	0	0	0	0	217	
VAGINITIS	0	542	0	6	0	0	0	1	0	0	0	0	0	0	2944	
YERSINIOSIS	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	

* Counties which reported fewer than 5 cases.

Table 4. County abbreviations

AL	Allen	JA	Jackson	SA	Saline
AN	Anderson	JF	Jefferson	SC	Scott
AT	Atchison	JW	Jewell	SG	Sedgwick
BA	Barber	JO	Johnson	SW	Seward
BT	Barton	KE	Kearny	SN	Shawnee
BB	Bourbon	KM	Kingman	SD	Sheridan
BR	Brown	KW	Kiowa	SH	Sherman
BU	Butler	LB	Labette	SM	Smith
CS	Chase	LE	Lane	SF	Stafford
CQ	Chatauqua	LV	Leavenworth	ST	Stanton
CK	Cherokee	LC	Lincoln	SV	Stevens
CN	Cheyenne	LN	Linn	SU	Sumner
CA	Clark	LG	Logan	TH	Thomas
CY	Clay	LY	Lyon	TR	Trego
CD	Cloud	MN	Marion	WB	Wabaunsee
CF	Coffey	MS	Marshall	WA	Wallace
CM	Comanche	MP	McPherson	WS	Washington
CL	Cowley	ME	Meade	WH	Wichita
CR	Crawford	MI	Miami	WL	Wilson
DC	Decatur	MC	Mitchell	WO	Woodson
DK	Dickinson	MG	Montgomery	WY	Wyandotte
DP	Doniphan	MR	Morris		
DG	Douglas	MT	Morton		
ED	Edwards	NM	Nemaha		
EK	Elk	NO	Neosho		
EL	Ellis	NS	Ness		
EW	Ellsworth	NT	Norton		
FI	Finney	OS	Osage		
FO	Ford	OB	Osborne		
FR	Franklin	OT	Ottawa		
GE	Geary	PN	Pawnee		
GO	Gove	PL	Phillips		
GH	Graham	PT	Pottawatomie		
GT	Grant	PR	Pratt		
GY	Gray	RA	Rawlins		
GL	Greeley	RN	Reno		
GW	Greenwood	RP	Republic		
HM	Hamilton	RC	Rice		
HP	Harper	RL	Riley		
HV	Harvey	RO	Rooks		
HS	Haskell	RH	Rush		
HG	Hodgeman	RS	Russell		

Table 5. Map of Kansas

Table 6. Publications on disease control in Kansas, 1994

Bisgard KM, Sutter RW, Strikas R, Wharton M, Hadler SC. Tetanus immunization in adults (letter). JAMA 1994;272:1990-1901.

Bisgard KM, Welbel S, Valway S, Onorato I, Woodley C, Sosin D, Pelletier AR. Tuberculosis outbreak in a rural community in Kansas, 1993. Abstracts of the 43rd Annual Conference of the Epidemic Intelligence Service, Atlanta, April 18-22, 1994. Washington, D.C.; Department of Health and Human Services, 1994.

Bisgard KM, Welbel S, Valway S, Onorato I, Woodley C, Sosin D, Pelletier AR, Tuberculosis outbreak in a rural community in Kansas, 1993. American Thoracic/American Lung Association Conference; Boston, May 21-25, 1994. Am J Resp Crit Care 1994;149:A703.

CDC. Tetanus - Kansas, 1993. MMWR. 1994;43:309-311.

CDC. Maternal Hepatitis B screening practices - California, Connecticut, Kansas, and United States, 1992-1993. MMWR. 1994;43:311, 317.

CDC. Assessment of undervaccinated children following a mass vaccination campaign - Kansas, 1993. MMWR. 1994;43:572-573.

KDHE. HIV prevalence among childbearing women in Kansas. Kansas Medicine. 1994;94:18-19.

KDHE. Tuberculosis outbreak in Finney County, 1993. Kansas Medicine. 1994;94:50.

KDHE. Hantavirus pulmonary syndrome: Kansas, 1993. Kansas Medicine. 1994;94:74-75.

KDHE. Pediatric blood lead testing in Kansas, 1993. Kansas Medicine. 1994;94:98.

KDHE. Hypertension in Kansas, 1992. Kansas Medicine. 1994;94:111-112.

KDHE. Drug susceptibility of tuberculosis isolates in Kansas, 1992-1993. Kansas Medicine. 1994;94:147-148.

KDHE. Chlamydia in Kansas, 1993. Kansas Medicine. 1994;94:173, 175.

KDHE. Immunization coverage rates among two-year-olds in Kansas. Kansas Medicine. 1994;94:197-198.

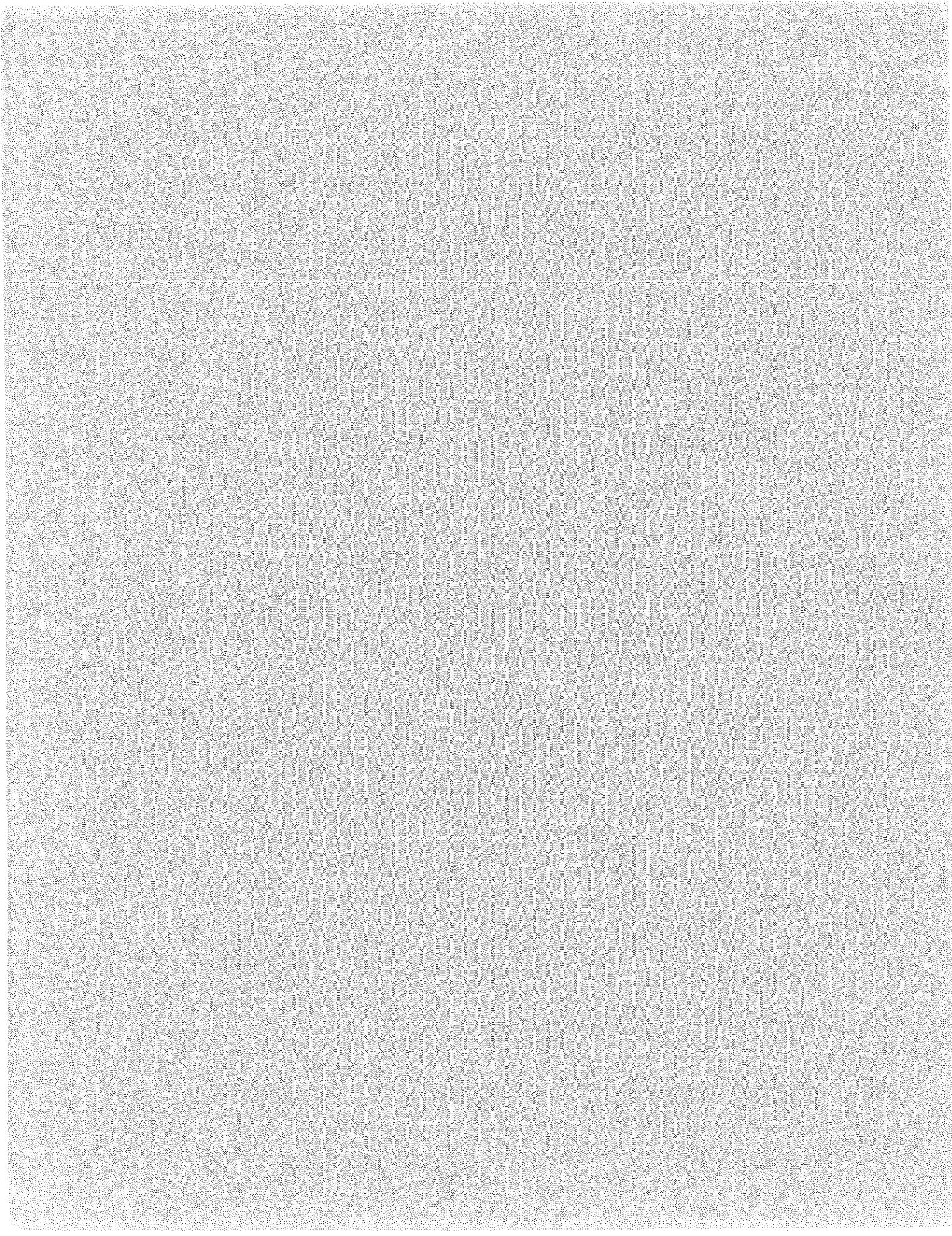
KDHE. Meningococcal disease in Kansas, 1990-1993. Kansas Medicine. 1994;94:218-219.

KDHE. Malaria in Kansas, 1988-1993. Kansas Medicine. 1994;94:255-256.

KDHE. E. coli O157:H7 in Kansas, January 1993 to September 1994. Kansas Medicine. 1994;94:272-273.

Pelletier AR, Baron RC. Childhood mortality from injuries in Kansas, 1985-1990. Kansas Medicine. 1994;94:10-14.

Wilberschied, LA. Reportable diseases in Kansas: 1993 summary. KDHE, Bureau of Disease Control. 1994.



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264-12